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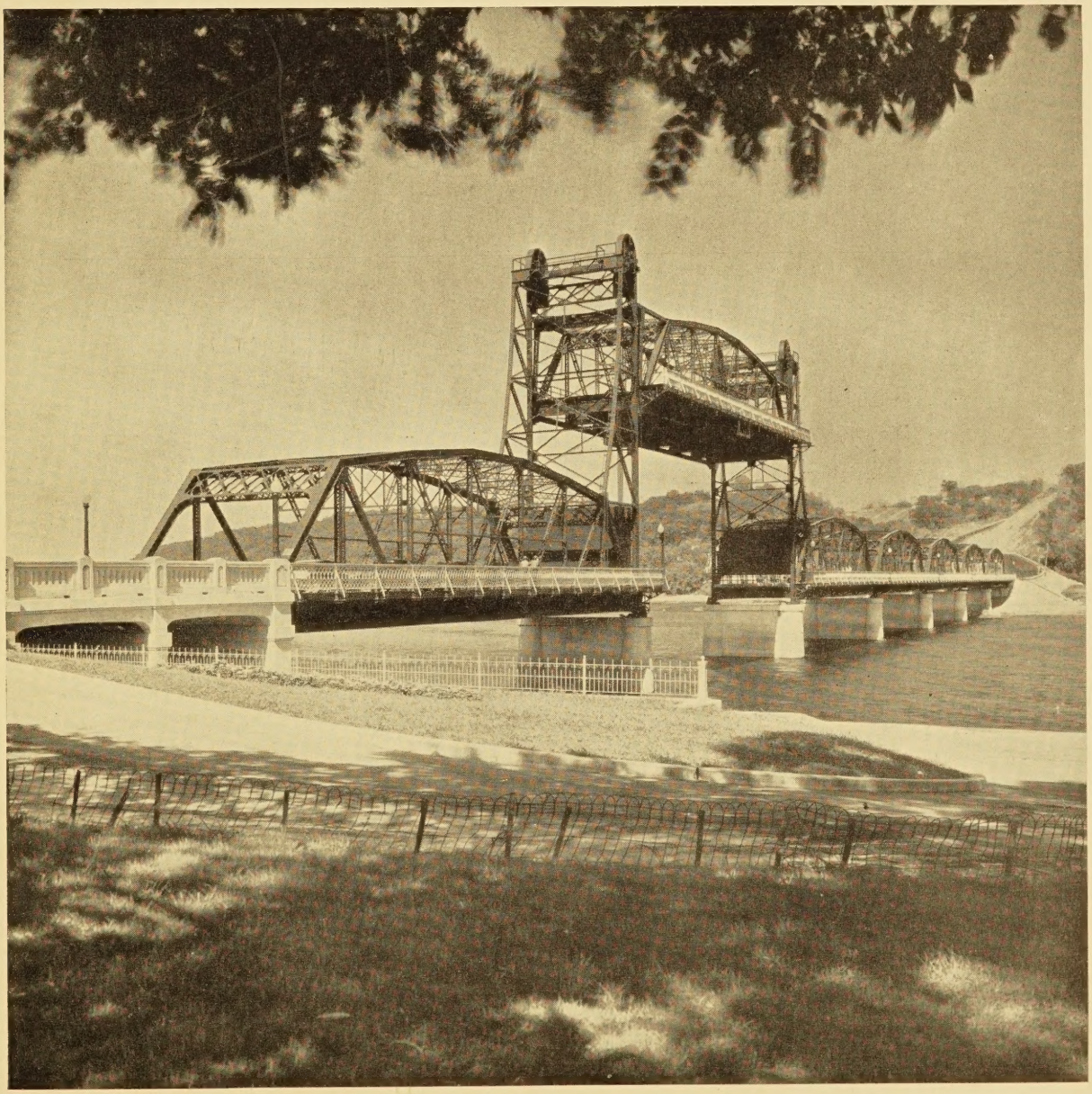

HIGHWAY BRIDGE OVER THE ST. CROIX RIVER AT STILLWATER, MINNESOTA

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PUBLIC ROADS ▸▸▸ *A Journal of Highway Research*

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The reports of research published in this magazine are necessarily qualified by the conditions of the tests from which the data are obtained. Whenever it is deemed possible to do so, generalizations are drawn from the results of the tests; and, unless this is done, the conclusions formulated must be considered as specifically pertinent only to described conditions.

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THE MINNESOTA FINANCIAL SURVEY

DIGEST OF A SURVEY OF THE FINANCES OF MINNESOTA IN 1932, WITH SPECIAL REFERENCE TO HIGHWAYS, CONDUCTED BY THE BUREAU OF PUBLIC ROADS AND THE UNIVERSITY OF WISCONSIN

Reported by ELIZABETH CHURCH, Assistant Research Analyst, Division of Highway Transport, Bureau of Public Roads

THE DEVELOPMENT of highway systems, for the most part, has been a process of evolution. In the past but little information has been gathered concerning the location of roads, the sources of revenue, the places of expenditure, and highway laws—information upon which rational highway planning should be based. With a network of roads laid out and partially improved, the main problems now confronting highway officials are the coordination and improvement of service in accordance with traffic needs and local economic conditions.

This cooperative economic survey is intended to serve as an aid to highway planners. The primary objective of the survey was to determine all facts connected with the financing of roads and streets. This involved the determination of highway revenues, disbursements and debt, the relations of highway receipts and expenditures to all other public financial transactions, the mileage and surfacing of the various systems of roads, and general data concerning the distribution of wealth and population throughout the State.

In Minnesota a road-use study was made in addition to the economic survey. The purpose of this second study was to determine the amount and origin of travel upon the various systems of roads and streets in both rural and urban areas. By correlating the two types of studies a measurement of benefits as compared with expenditures can be made.

The Minnesota financial survey is the fifth of a series of similar investigations conducted in various States. It was carried on under a cooperative agreement between the Bureau of Public Roads, the Minnesota State Highway Department, and the University of Wisconsin.[1]

PLAN OF STUDY OUTLINED

Information was gathered from all units of government within the State. This necessitated the consulting of records, personal visits to State officials and some county and local officials, frequent conferences, and the compilation of data obtained by many thousands of questionnaires. The data so gathered were tabulated, analyzed, and subsequently presented in such form as to facilitate comparisons.

Information is shown for the rural areas and urban places, the latter being grouped according to population in the 1930 census as follows:

Group 1—places having a population under 2,500.

Group 2—places having a population from 2,500 to 14,999.

Group 3—places having a population from 15,000 to 74,999.

Group 4—places having a population from 75,000 to 399,999.

Group 5—places having a population from 400,000 to 999,999. St. Paul and Duluth are the only cities in group 4 and Minneapolis is the only city in group 5.

[1] The study was made during 1934 under the immediate direction of Dr. Henry R. Trumbower, professor of economics at the University of Wisconsin and economist for the Bureau of Public Roads, and H. R. Briggs, field investigator and statistician.

The data for taxes and receipts are shown by type of impost, and a tabulation showing the source of highway revenues was made. Taxes are also shown by the unit of government responsible for their levy and by the class of place liable for their payment. Expenditures are classified according to the purpose for which they were made—highways, education, public benefit, and government. They are shown both as expended by the several governmental agencies and as expended in and for the rural areas and the various classes of urban places. The outstanding indebtedness is classified by the unit of government incurring it and by the purposes for which originally contracted. Payments for debt service are divided between those made for principal and interest and are shown by the unit of government incurring the costs.

In this summary the general economic facts are presented first to form a background for the detailed discussion of highways and highway usage that follows.

The following definitions are basic in all of the surveys:

Highway refers to the construction, maintenance, and administration of all roads, streets, and alleys. Street cleaning and street lighting are considered items of public benefit and are not included in the definition of highways. Highways are classified as State, county, and rural roads and city streets. These highway classifications are further discussed later in this report.

Education consists of all activities in connection with the construction, maintenance, and administration of and teaching in all public schools. The functions of public libraries are considered to be educational activities.

Public benefit consists of all items pertaining to the protection of lives and property and the pleasure or well-being of the people. It includes police and fire protection, courts, sanitation, parks and playgrounds, and charitable and penal institutions.

Government includes all items concerning the general administration of public affairs not included in the definitions of the three preceding public purposes. These are primarily the executive and administrative functions of government.

Expenditures are public costs defrayed out of public funds. The net expenditures (the total expenditures less the earnings made by the public service charged with the costs) are shown. Interest but not principal payments on indebtedness are included in the definition of expenditures.

Debt service consists of the interest and principal payments on public obligations during the year. The total public disbursements can be obtained by adding debt principal payments to the expenditures. Debt retirement payments are not considered as a cost of the current year. Such practice would result in a duplication of costs, as the funds are considered as an expenditure of the year when borrowed and spent.

Imposts include every payment of any nature made to a public body in connection with the authority vested

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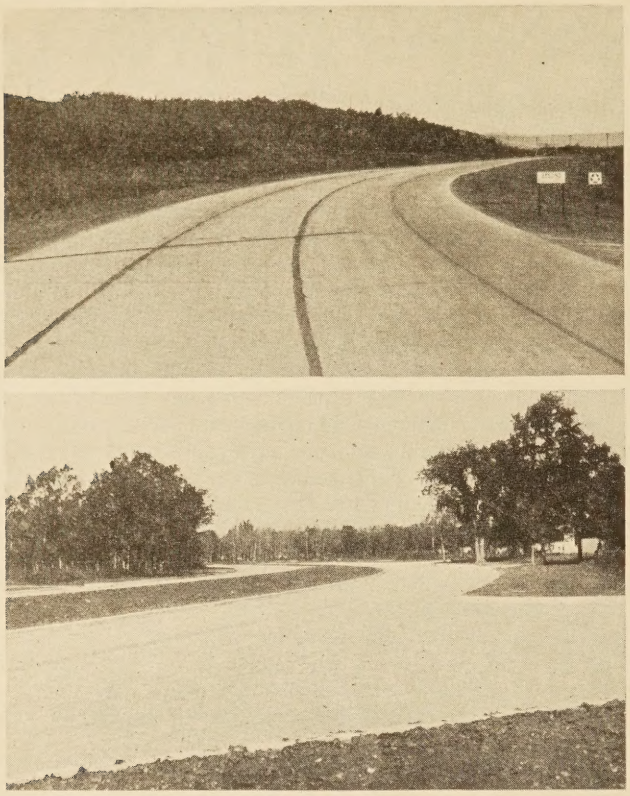


ROADS ON THE STATE TRUNK HIGHWAY SYSTEM.

within it. Thus, all licenses, fees, permits, special assessments, and taxes proper are shown as imposts.

User revenues are the imposts paid by the operators of motor vehicles in the form of vehicle license fees, motor-fuel taxes, and miscellaneous motor-vehicle imposts.

The data for Minnesota are shown for the calendar year 1932. In cases where the calendar and fiscal years did not coincide, slight adjustments were made to obtain comparable statistics.

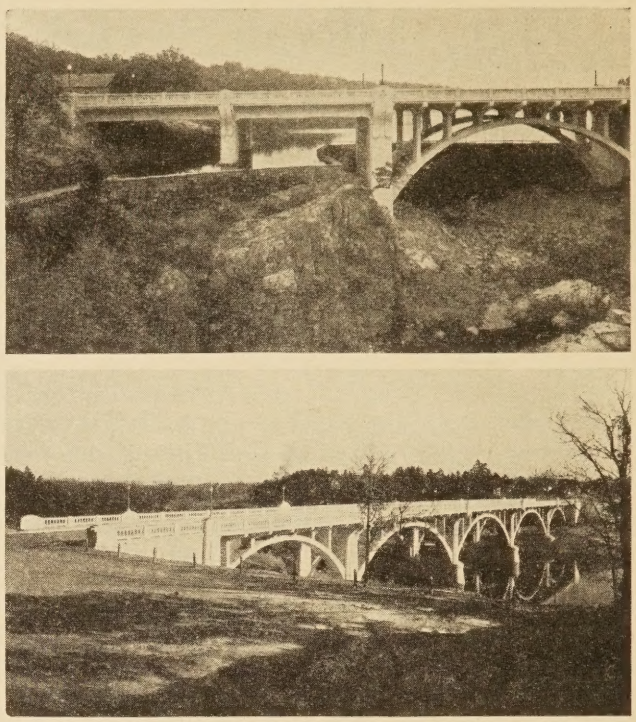
POPULATION AND VALUATION DATA PRESENTED

Minnesota is chiefly a farming State, with almost two-thirds of its total population of 2,563,953 living in rural areas and small incorporated places. All but 3 percent of the remainder of the population live in the three cities of Minneapolis, St. Paul, and Duluth. In Minnesota there are only 13 cities and one village (Hibbing) having populations over 10,000. The population distribution between the various classes of places is shown in table 1.

TABLE 1.—*Population and assessed valuation of the townships and incorporated places in Minnesota*

Class of place	Population [1]		Valuation [2]		Per-capita valuation
	Number of persons	Percent	Amount	Percent	
Townships (rural areas)	966,819	37.7	$808,798,600	42.9	$836.56
Places to 2,499	339,518	13.2	192,788,800	10.2	567.83
Places 2,500 to 14,999	342,054	13.3	191,344,500	10.2	559.40
Places 15,000 to 74,999	78,137	3.1	102,232,600	5.4	1,308.38
St. Paul and Duluth	373,069	14.6	258,220,100	13.7	692.15
Minneapolis	464,356	18.1	330,853,600	17.6	712.50
State total	2,563,953	100.0	1,884,238,200	100.0	734.90

[1] In 1930. [2] In 1932.



HIGHWAY BRIDGES IN MINNESOTA: UPPER, BRIDGE OVER REDWOOD RIVER AT REDWOOD FALLS; LOWER, BRIDGE OVER MISSISSIPPI RIVER AT BRAINERD.

The total assessed valuation of Minnesota in 1932 was $1,884,238,200, of which 42.9 percent was in the rural areas. The distribution between the various classes of places is shown in table 1. Hennepin, Ramsey, and St. Louis counties, assessed at more than 45 percent of the total valuation of the State, embody only 9 percent of the area. The assessed value of 29 counties comprising over 45 percent of the area of the State is only 12 percent of the total valuation.

The per-capita valuation ranges from $559 in the places having a population from 2,500 to 14,999 to $1,308 in the places having a population from 15,000 to 74,999. The high per-capita valuation in the latter group is caused by the inclusion of the village of Hibbing, where mining property located within the corporate limits raises the per-capita valuation to $4,494.

GENERAL PROPERTY TAX PRINCIPAL SOURCE OF REVENUE

In Minnesota, as in most other States, the principal source of revenue is the general property tax, which yielded $127,496,900 in 1932. This amount is 75.1 percent of the total tax levy for that year. Considered as levies on general property and therefore included in the above total are $8,371,300 of special assessments which are levied by the local units of government (table 2).

The State levied $14,856,000, or 11.7 percent of the total general property tax; the counties levied $24,977,700, or 19.6 percent; and the urban and rural local units of government levied $87,663,200, or 68.7 percent.

Of second importance as sources of revenue are the State motor-vehicle imposts. In 1932 the motor-vehicle owners contributed $20,368,100 of user revenues. This amount was 12 percent of the total imposts received. The other sources of revenue are also shown in table 2.

Table 3 shows the units of government responsible for the levy of the taxes listed in the preceding table. The State government itself levied almost one-third of the total taxes. The counties for their purposes levied about half as much as did the State. The total county tax levy was $25,966,700, or $10.13 per capita. The remainder of the imposts, amounting to $90,791,600, or $35.41 per capita, were levied by the local units of government for their own purposes.

PER-CAPITA TAXATION HIGHEST IN CITIES

All State and county imposts are ultimately paid by taxpayers in the local communities. Table 4 shows the final incidence of taxes by type of tax and by class of place charged with the payment. By deducting the per-capita tax levied by the several classes of local units as shown in table 3 from the per-capita tax paid by these same residents (table 4), the per-capita State and county taxes which the residents in the respective places must pay can be found.

Table 5 presents data that facilitate interesting comparisons. The first column of figures shows the actual tax rates per $100 of valuation as levied on general property in the several classes of places. The second column of figures gives the actual rates needed to raise all funds by general property tax levies. The last column in the table gives the percentages that general property taxes were of the total tax levies, and shows that, had general property been subject to pay all taxes, the rates would have been from 30 to 40 percent higher.

The taxes imposed for street and highway purposes will be shown in more detail later.

HIGHWAY EXPENDITURES AMOUNT TO $21.74 PER CAPITA

In 1932, $175,488,500 was spent by the State, counties, and local units of government to support the varied activities carried on for the residents of Minnesota. The State itself spent $53,582,800, or 30.5 percent of the total and the counties spent $29,708,100, or 16.9 percent. The remainder, $92,197,600, was expended by the rural and urban areas for maintaining the functions of the local governments.

Of the total amount expended by the State, $32,149,900 was for highways, $5,902,800 for education, $13,774,000 for public benefit, and $1,756,100 for government. It is evident from these figures that the main functions of the State, as measured by expenditures, are the construction and maintenance of highways and the protection of persons and property.

MINNESOTA TAXES IN 1932

Total taxes and imposts levied for all purposes in Minnesota in 1932 were $169,742,600. Taxation of general property totaled $127,496,900; all motor-vehicle imposts, including motor-fuel tax, $20,368,100; other taxes including insurance and inheritance taxes, money and credits tax, railroad taxes, and miscellaneous State and local revenues, $21,877,600.

Of the total taxes and imposts levied, rural taxpayers were charged with $51,497,100, or 30.3 percent; residents of incorporated places having a population to 2,499, $21,780,800 or 12.8 percent; in places of 2,500 to 14,999 population, $23,430,800 or 13.8 percent; in places of 15,000 to 74,999 population, $8,942,300 or 5.3 percent; in St. Paul and Duluth, $27,486,500 or 16.2 percent; and in Minneapolis, $36,605,100 or 21.6 percent.

The average actual tax rates on general property per $100 valuation were as follows: Rural, $4.88; incorporated places to 2,499 in population, $8.00; places of 2,500 to 14,999 population, $8.97; places of 15,000 to 74,999 population, $6.71; St. Paul and Duluth, $8.16; and Minneapolis, $8.33.

Rural motor-vehicle owners paid in license fees and gasoline taxes an average of $21.87; those resident in incorporated places to 2,499 population, $27.36; in places 2,500 to 14,999 population, $29.95; in places 15,000 to 74,999 population, $34.36; in St. Paul and Duluth, $36.05; and in Minneapolis, $36.72.

TABLE 2.—*Sources of revenue by type of tax or revenue in 1932*

Type of revenue	Amount	Percent	Per capita
Ad valorem general property taxes	$119,125,600	70.2	$46.46
Special assessments	8,371,300	4.9	3.26
Telephone and telegraph taxes	898,100	.5	.35
State motor-vehicle imposts	20,368,100	12.0	7.94
Money and credits tax	1,257,400	.8	.49
Other local imposts [1]	4,117,400	2.4	1.61
Inheritance taxes	2,607,900	1.6	1.02
Insurance taxes	1,928,800	1.1	.75
Railroad taxes	4,304,400	2.5	1.68
Miscellaneous State revenue	6,763,600	4.0	2.64
Total	169,742,600	100.0	66.20
RECAPITULATION			
General property taxes	$119,125,600	70.2	$46.46
Special assessments	8,371,300	4.9	3.26
Motor-vehicle imposts	20,368,100	12.0	7.94
Other local imposts [1]	4,117,400	2.4	1.61
Other State receipts	17,760,200	10.5	6.93
Total	169,742,600	100.0	66.20

[1] Includes county, township, city, and village fees, fines, licenses, etc.

TABLE 3.—*Total of all State and local charges imposed by the State and its subdivisions for collection in 1932*

Unit of government imposing tax	Amount	Percent	Per capita
State	$52,984,300	31.2	$20.66
Counties	25,966,700	15.3	10.13
Townships	20,794,400	12.2	21.51
Places to 2,499	11,881,900	7.0	35.00
Places 2,500 to 14,999	14,291,700	8.4	41.78
Places 15,000 to 74,999	4,848,100	2.9	62.05
St. Paul and Duluth	15,876,800	9.4	42.56
Minneapolis	23,098,700	13.6	49.74
Total	169,742,600	100.0	66.20

TABLE 4.—*Total of all State and local charges payable by taxpayers in the local units of government in 1932*

Paid by taxpayers in—	General property tax	Motor vehicle and motor fuel taxes [1]	Other taxes	All taxes	Per-cent	Per capita
Townships	$39,448,100	$6,289,100	$5,759,900	$51,497,100	30.3	$53.26
Places to 2,499	15,419,200	3,168,900	3,192,700	21,780,800	12.8	64.15
Places 2,500 to 14,999	17,164,600	2,532,600	3,733,600	23,430,800	13.8	68.50
Places 15,000 to 74,999	6,857,900	680,000	1,404,400	8,942,300	5.3	114.44
St. Paul and Duluth	21,058,900	3,131,400	3,296,200	27,486,500	16.2	73.68
Minneapolis	27,548,200	4,566,100	4,490,800	36,605,100	21.6	78.83
Total	127,496,900	20,368,100	21,877,600	169,742,600	100.0	66.20

[1] Includes $32,700 out-of-State registration fees.

AN IMPROVED ROADSIDE IN MINNESOTA.

TABLE 5.—*Comparison between the tax rate on general property necessary to produce all revenues from property taxes and the actual tax rate on general property as levied, per $100 valuation*

Unit of government	Actual tax rate on general property as levied	Tax rate needed to raise all funds by general property tax levies	Percentage that general property taxes are of all taxes and imposts
Townships	$4.88	$6.37	76.6
Places to 2,499	8.00	11.30	70.8
Places 2,500 to 14,999	8.97	12.25	73.2
Places 15,000 to 74,999	6.71	8.75	76.7
St. Paul and Duluth	8.16	10.64	76.7
Minneapolis	8.33	11.06	75.3
Average for State	6.77	9.01	75.1

Of the total county expenditures of $29,708,100, $24,452,900, or 82.3 percent, was for highways and public benefit. Only a relatively small amount was spent for education by the counties.

The local rural and urban areas expended 11.8 percent of their money for highways, 56.5 percent for education, 26.3 percent for public benefit, and but 5.4 percent for government (table 6).

Comparisons between the amounts spent by the various governmental units for the several purposes are more obvious when expressed in expenditures per capita (table 7). Since the amount spent for a given purpose is an indication of the extent to which a unit of government performs that service for residents, a comparison of the functions of the several governments can also be made from the tables.

From table 8 it can be seen that the amount spent for education in Minnesota was 33.2 percent of the total expenditures, for highways 31.8, for public benefit 28.3, and for government 6.7.

Sixty percent of the expenditures made by the State government was for highways. This was 57.7 percent of the total amount spent for roads and streets in the entire State. This large expenditure is to be expected, for although the mileage of roads administered by the State is comparatively small, the high types of construction and high standards of maintenance require extensive outlays.

TABLE 6.—*Total expenditures in Minnesota in 1932 by purpose and by governmental unit*

Purpose	State		County		Local		Total	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Highways:								
Amount	$32,149,900	60.0	$12,720,700	42.8	$10,862,000	11.8	$55,732,600	31.8
Percent	57.7		22.8		19.5		100.0	
Per capita	$12.54		$4.96		$4.24		$21.74	
Education:								
Amount	$5,902,800	11.0	$301,600	1.0	$52,072,100	56.5	$58,276,500	33.2
Percent	10.1		0.5		89.4		100.0	
Per capita	$2.30		$0.12		$20.31		$22.73	
Public benefit:								
Amount	$13,774,000	25.7	$11,732,200	39.5	$24,246,200	26.3	$49,752,400	28.3
Percent	27.7		23.6		48.7		100.0	
Per capita	$5.37		$4.57		$9.46		$19.40	
Government:								
Amount	$1,756,100	3.3	$4,953,600	16.7	$5,017,300	5.4	$11,727,000	6.7
Percent	15.0		42.2		42.8		100.0	
Per capita	$0.69		$1.93		$1.95		$4.57	
Total:								
Amount	$53,582,800	100.0	$29,708,100	100.0	$92,197,600	100.0	$175,488,500	100.0
Percent	30.5		16.9		52.6		100.0	
Per capita	$20.90		$11.58		$35 96		$68.44	

TABLE 7.—*All State and local expenditures in 1932, and per capita expenditures by purpose, based on the population in 1930*

Expended by—	Total amount	Per capita expenditure for—				
		Highways	Education	Public benefit	Government	Total
State	$53,582,800	$12.54	$2.30	$5.37	$0.69	$20.90
Counties	29,708,100	4.96	.12	4.57	1.93	11.58
Townships	14,581,000	4.03	9.66	.44	.95	15.08
Places to 2,499	15,859,100	2.54	35.39	6.60	2.18	46.71
Places 2,500 to 14,999	17,288,200	3.74	32.92	11.39	2.49	50.54
Places 15,000 to 74,999	5,030,000	6.22	34.22	19.96	3.98	64.38
St. Paul and Duluth	14,743,900	4.61	19.14	11.33	4.44	39.52
Minneapolis	24,695,400	5.65	20.76	25.63	1.15	53.19
Total	175,488,500	21.74	22.73	19.40	4.57	68.44

TABLE 8.—*Classification of expenditures by purpose and by units of government in 1932*

Unit of government	Percentage of expenditures by the units of government for the purposes indicated					Percentage of the total expenditure for each purpose made by each unit of government				
	Highways	Education	Public benefit	Government	All purposes	Highways	Education	Public benefit	Government	All purposes
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
State	60.0	11.0	25.7	3.3	100.0	57.7	10.1	27.7	15.0	30.5
Counties	42.8	1.0	39.5	16.7	100.0	22.8	.5	23.6	42.2	16.9
Townships	26.7	64.1	2.9	6.3	100.0	7.0	16.0	.9	7.8	8.3
Places to 2,499	5.4	75.8	14.1	4.7	100.0	1.5	20.6	4.5	6.3	9.0
Places 2,500 to 14,999	7.4	65.1	22.6	4.9	100.0	2.3	19.3	7.8	7.3	9.9
Places 15,000 to 74,999	9.7	53.1	31.0	6.2	100.0	.9	4.6	3.1	2.7	2.9
St. Paul and Duluth	11.7	48.4	28.7	11.2	100.0	3.1	12.3	8.5	14.1	8.4
Minneapolis	10.6	39.0	48.2	2.2	100.0	4.7	16.6	23.9	4.6	14.1
Total	31.8	33.2	28.3	6.7	100.0	100.0	100.0	100.0	100.0	100.0

About 26 percent of the State expenditure was for public benefit. The largest part of this cost was for relief purposes and for the maintenance of charitable and penal institutions. The amount spent by the State for the protection and care of persons and property was 27.7 percent of the total expended for public benefit.

The chief functions of the counties, too, are the construction and maintenance of highways and the protection and care of the people. The State and counties together spent 80.5 percent of the total expenditures made in Minnesota for highways and 51.3 percent of the total for public benefit.

The proportion of county expenditures for government to those for other purposes was relatively high, and represented 42.2 percent of the total expenditures for governmental purposes made by all units of government. This resulted from the large expenditures incurred in connection with the collection and administration of taxes and interest payments on bonds.

The greatest proportion of expenditures by the local units of government was for education. Of the total expenditure of $35.96 per person, $20.31, or 56 percent, was for education. Minneapolis is the only place where the expenditure for education is not the largest single item; the amount spent for public benefit in Minneapolis exceeded by $4.87 per capita the amount spent for education.

In the rural areas a relatively small amount was spent for public benefit. Except for St. Paul and Duluth, the per-capita expenditure for public benefit tended to increase as the size of place increased.

Expenditures by the State and counties are made in and for the benefit of the residents in the rural areas and the several classes of urban places. For example, the total amount spent in the rural areas for all purposes by the State, counties, and townships was $69,160,200, or 39.4 percent of the total of all expenditures. This was $71.53 per capita, of which the townships themselves spent $15.08 per capita. Nearly two-thirds of the amount spent in the rural areas was for highways.

It is not to be inferred, however, that this highway expenditure in rural areas confers an undue benefit upon those localities, as these expenditures were primarily for through highways traveled by vehicles from all parts of the State.

Table 9 shows the entire amount per capita spent in each class of place by all governmental agencies for all purposes.

TABLE 9.—*Per-capita expenditures by purpose in the several classes of places, based on the population in 1930*

Class of place in which expenditure was made	Highways	Education	Public benefit	Government	Total
Townships	$46.05	$12.10	$9.91	$3.47	$71.53
Places to 2,499	10.07	37.84	15.92	4.70	68.53
Places 2,500 to 14,999	8.21	35.36	21.28	4.99	69.84
Places 15,000 to 74,999	6.88	36.64	29.70	6.23	79.45
St. Paul and Duluth	4.89	21.52	23.93	9.13	59.47
Minneapolis	5.65	23.12	34.97	2.54	66.28
Total	21.74	22.73	19.40	4.57	68.44

TABLE 10.—*Per-capita taxation and expenditures in 1932, based on the population in 1930*

Class of place	Per-capita taxation	Per-capita expenditures	Ratio of expenditures to taxation
Townships	$53.26	$71.53	1.34
Places to 2,499	64.15	68.53	1.07
Places 2,500 to 14,999	68.50	69.84	1.02
Places 15,000 to 74,999	114.44	79.45	.69
St. Paul and Duluth	73.68	59.47	.81
Minneapolis	78.83	66.28	.84
Average for State	66.20	68.44	1.03

PER-CAPITA EXPENDITURES IN RURAL AREAS EXCEEDED PER-CAPITA TAXATION

A comparison of the taxes and expenditures per capita in the various localities is given in table 10. The taxes are those paid by residents of the communities; the expenditures are those made in and for the residents of the localities by all units of government. The table indicates that there is a flow of funds to the rural areas and smaller urban places. The per-capita expenditures in the rural areas exceeded the per-capita taxation by $18.27. On the other hand the expenditures in the larger urban areas were less than the taxes.

The expenditures for the entire State exceeded the taxation by $2.24 per capita. This lag of taxes behind expenditures reflects the effect of financing current costs from borrowings and balances.

Comprehensive figures regarding the flow of funds from urban to rural communities are given in tables 11, 12, and 13. These tables show that $69,160,200 was expended in the rural areas by all governmental agencies for all purposes, while the same communities paid $51,497,100 in taxes. Of the total expenditures in the rural areas, 21.1 percent was made by the townships and 78.9 percent by the State and counties. This flow of funds to the rural areas is due mainly to the large

TABLE 11.—*Total of all taxes paid by residents of rural and urban areas*

Area	Type of impost	Tax-levying agency								
		Local governments			State and county governments			All governments		
		Amount	Percent	Per capita	Amount	Percent	Per capita	Amount	Percent	Per capita
Rural	Property imposts	$20,731,700	99.2	$21.44	$18,716,400	61.2	$19.36	$39,448,100	76.6	$40.80
	Other imposts	172,500	.8	.18	11,876,500	38.8	12.28	12,049,000	23.4	12.46
	All imposts	20,904,200	100.0	21.62	30,592,900	100.0	31.64	51,497,100	100.0	53.26
Urban	Property imposts	66,931,500	94.1	41.91	21,117,300	44.8	13.22	88,048,800	74.5	55.13
	Other imposts	4,213,300	5.9	2.64	25,983,400	55.2	16.27	30,196,700	25.5	18.91
	All imposts	71,144,800	100.0	44.55	47,100,700	100.0	29.49	118,245,500	100.0	74.04
Total	Property imposts	87,663,200	95.2	34.19	39,833,700	51.3	15.54	127,496,900	75.1	49.73
	Other imposts	4,385,800	4.8	1.71	37,859,900	48.7	14.76	42,245,700	24.9	16.47
	All imposts	92,049,000	100.0	35.90	77,693,600	100.0	30.30	169,742,600	100.0	66.20

TABLE 12.—*Total expenditures by purpose as made by all units of government for residents of rural and urban areas*

Area	Purpose	Local governments			State and county governments			All governments		
		Amount	Percent	Per capita	Amount	Percent	Per capita	Amount	Percent	Per capita
Rural	Highways	$3,894,300	26.7	$4.03	$40,628,800	74.4	$42.02	$44,523,100	64.4	$46.05
	Education	9,342,900	64.1	9.66	2,361,800	4.3	2.44	11,704,700	16.9	12.10
	Public benefit	424,900	2.9	.44	9,155,000	16.8	9.47	9,579,900	13.9	9.91
	Government	918,900	6.3	.95	2,433,600	4.5	2.52	3,352,500	4.8	3.47
	Total	14,581,000	100.0	15.08	54,579,200	100.0	56.45	69,160,200	100.0	71.53
Urban	Highways	6,967,700	9.0	4.36	4,241,800	14.8	2.66	11,209,500	10.5	7.02
	Education	42,729,200	55.0	26.75	3,842,600	13.4	2.41	46,571,800	43.8	29.16
	Public benefit	23,821,300	30.7	14.92	16,351,200	56.9	10.23	40,172,500	37.8	25.15
	Government	4,098,400	5.3	2.57	4,276,100	14.9	2.68	8,374,500	7.9	5.25
	Total	77,616,600	100.0	48.60	28,711,700	100.0	17.98	106,328,300	100.0	66.58
Total	Highways	10,862,000	11.8	4.24	44,870,600	53.9	17.50	55,732,600	31.7	21.74
	Education	52,072,100	56.5	20.31	6,204,400	7.4	2.42	58,276,500	33.2	22.73
	Public benefit	24,246,200	26.3	9.46	25,506,200	30.6	9.94	49,752,400	28.4	19.40
	Government	5,017,300	5.4	1.95	6,709,700	8.1	2.62	11,727,000	6.7	4.57
	Total	92,197,600	100.0	35.96	83,290,900	100.0	32.48	175,488,500	100.0	68.44

TABLE 13.—*Highway taxes paid by residents of rural and urban areas* [1]

Area	Type of impost	Tax-levying agency								
		Local governments			State and county governments			All governments		
		Amount	Percent	Per capita	Amount	Percent	Per capita	Amount	Percent	Per capita
Rural	Property imposts	$5,562,700	100.0	$5.75	$5,028,200	44.5	$5.20	$10,590,900	62.8	$10.95
	Other imposts	----------	----------	----------	6,276,000	55.5	6.50	6,276,000	37.2	6.50
	All imposts	5,562,700	100.0	5.75	11,304,200	100.0	11.70	16,866,900	100.0	17.45
Urban	Property imposts	4,110,100	100.0	2.57	4,613,000	24.7	2.89	8,723,100	38.3	5.46
	Other imposts	----------	----------	----------	14,059,400	75.3	8.80	14,059,400	61.7	8.80
	All imposts	4,110,100	100.0	2.57	18,672,400	100.0	11.69	22,782,500	100.0	14.26
Total	Property imposts	9,672,800	100.0	3.77	9,641,200	32.2	3.76	19,314,000	48.7	7.53
	Other imposts	----------	----------	----------	20,335,400	67.8	7.93	20,335,400	51.3	7.93
	All imposts	9,672,800	100.0	3.77	29,976,600	100.0	11.69	39,649,400	100.0	15.46

[1] Does not include $32,700 out-of-State registration fees.

expenditures for highway purposes. This does not mean that subsidies are being granted to rural areas. The residents of urban areas perform travel on these rural roads approximately commensurate with their contributions.

Table 13, which classifies highway taxes, is of particular interest. It shows: (1) That the only taxes levied for highways by the local governments were property imposts; (2) that the property taxes accounted for one-third of the levies made for highways by the State and counties; (3) that of the imposts used for roads and streets, about one-half is from other-than-property taxes, mainly motor-vehicle revenues; (4) that the per-capita property taxes levied for highways in the rural areas were more than twice those levied in the urban areas; and (5) that the property taxes for highways were almost two-thirds of the total highway taxes paid by rural residents, while in the urban areas they represented but a little over one-third of the total paid by urban residents.

INDEBTEDNESS IN MINNESOTA DISCUSSED

The total outstanding indebtedness of all units of government in Minnesota in 1932 was $334,597,800. This consisted of $321,580,700 of bonded debt and $13,017,100 of temporary obligations. Table 14 gives the data for bonded debt only.

The bonded indebtedness of the State government was $111,335,300, of which rural credit bonds of over $60,000,000 comprised the greater portion. These rural credit bonds were agricultural loans intended as advances during an emergency. The State guaranteed their payment, and as the interest is in default upon this debt it has become a State liability. The debt of the State government itself was 34.6 percent of the total for all units of government.

The county bonded debt was $45,890,600, of which over $24,000,000 was for drainage ditches. The counties had no indebtedness for education.

The indebtedness of the townships, villages, and cities was $164,354,800, or 51.1 percent of the total bonded debt. The cities of Minneapolis, St. Paul, and Duluth incurred $109,523,200, or 66.6 percent of this total. The townships or rural areas incurred only $7,346,100, or 4.5 percent, and the municipalities of less than 75,000 population incurred $47,485,500, or 28.9 percent of the total local rural and urban bonded debt.

Of the total debt of $95,051,900 outstanding for highways, 62.3 percent was contracted by the State and counties for use on trunk and other main highway routes.

The indebtedness outstanding for public benefit was the largest amount incurred for any one purpose. Of the total debt of $130,999,300 incurred for public benefit, the State and counties contracted $92,653,300, or 70.7 percent. Large issues of rural credit and drainage ditch bonds account for approximately 90 percent of the public benefit debt incurred by the State and counties.

Indebtedness for education totaled $69,339,500, most of which was incurred by the local units of government. The debt for governmental purposes amounted to only 8 percent of the total.

Debt service consists of interest and principal payments on indebtedness. Interest payments are included in the total expenditures, principal payments are not. The total debt service in 1932 was $35,732,800, of which $20,304,400 was for principal and $15,428,400 for interest (table 15). Over 20 percent of the total revenues of all the governmental units in 1932 was used for interest and debt-retirement payments.

MINNESOTA EXPENDITURES IN 1932

The total expenditures for all purposes (exclusive of principal payments on bonds and loans) by all units of government in 1932 were $175,488,500, of which $55,732,600 was expended for highways and streets, $58,276,500 for education, $49,752,400 for public benefit, and $11,727,000 for other governmental purposes.

Expenditures by the State were $53,582,800; by the counties, $29,708,100; by Minneapolis, St. Paul, and Duluth, $39,439,300; by other incorporated places, $38,177,300; and by the townships, $14,581,000.

Of the total expenditures, 39.4 percent was made in the rural areas (townships); 13.3 percent in incorporated places having a population to 2,499; 13.6 percent in places of 2,500 to 14,999 population; 3.5 percent in places of 15,000 to 74,999 population; 12.7 percent in St. Paul and Duluth; and 17.5 percent in Minneapolis.

TABLE 14.—*Total bonded indebtedness of various units of government by purpose in 1932*

Unit of government	Highways	Education	Public benefit	Government	Total
State:					
Amount	$42,759,200	$772,500	$66,476,800	$1,326,800	$111,335,300
Per capita	16.67	0.30	25.93	0.52	43.42
Counties:					
Amount	16,430,100		26,176,500	3,284,000	45,890,600
Per capita	6.41		10.21	1.28	17.90
Townships:					
Amount	1,233,300	5,695,900	81,700	335,200	7,346,100
Per capita	1.28	5.89	0.08	0.35	7.60
Places to 2,499:					
Amount	1,625,900	13,755,400	4,124,100	2,240,800	21,746,200
Per capita	4.79	40.51	12.15	6.60	64.05
Places 2,500 to 14,999:					
Amount	2,878,100	10,982,200	5,342,600	2,349,300	21,552,200
Per capita	8.41	32.11	15.62	6.87	63.01
Places 15,000 to 74,999:					
Amount	84,000	915,000	573,400	2,614,700	4,187,100
Per capita	1.08	11.71	7.34	33.46	53.59
St. Paul and Duluth:					
Amount	11,337,100	14,271,500	20,895,600	3,611,400	50,115,600
Per capita	30.39	38.25	56.01	9.68	134.33
Minneapolis:					
Amount	18,704,200	22,947,000	7,328,600	10,427,800	59,407,600
Per capita	40.28	49.42	15.78	22.46	127.94
Total:					
Amount	95,051,900	69,339,500	130,999,300	26,190,000	321,580,700
Per capita	37.07	27.04	51.09	10.22	125.42

TABLE 15.—*Payments for debt service in 1932*

Unit of government	Principal	Interest	Total
State:			
Amount	$3,969,400	$4,648,100	$8,617,500
Per capita	1.55	1.81	3.36
Counties:			
Amount	3,776,800	2,580,300	6,357,100
Per capita	1.47	1.01	2.48
Local: [1]			
Amount	12,558,200	8,200,000	20,758,200
Per capita	4.90	3.20	8.10
Total:			
Amount	20,304,400	15,428,400	35,732,800
Per capita	7.92	6.02	13.94

[1] Townships and incorporated places.

MINNESOTA HIGHWAY SYSTEM DESCRIBED

There are four main classes of highways in Minnesota: (1) The State trunk system, which includes the Federal-aid system; (2) county roads; (3) local rural roads; and (4) city and village streets.

The routes included in the State trunk system are designated and described in the State constitution and are identical with the numbered State routes. The

entire construction and maintenance costs of the trunk routes are met with funds available to the State, and these State roads are entirely under the administration of the State highway department.

County roads are of three classes: (1) The legally designated State-aid roads; (2) county-aid roads; and (3) in some counties, special county roads. All are administered by the county, although some of the support for the State-aid roads comes from the State.

Local rural roads are those roads other than State and county highways lying outside corporate limits. They are administered and entirely financed by the townships.

Urban streets are thoroughfares within corporate units. They are administered by municipal authorities and the funds for their support are derived from local sources. For the most part the State trunk roads lying within the corporate limits are financed and administered by the cities in the same manner as in the case of all urban streets. This is particularly true of the larger cities. The city expenditures, therefore, include amounts spent by municipalities, both on the streets primarily carrying local traffic and also on those streets within the corporate limits that form part of the State routes.

The total mileage of the roads and streets comprising a transportation system must be known in making a complete highway analysis. Except in a few States, however, there is a general lack of adequate and reliable data on this subject. In Minnesota no information is available concerning the mileage of city streets, and the accuracy of the figures for rural highways is questionable.

One of the primary difficulties connected with the problem is the lack of uniformity regarding the meaning of the term "road." Roads may vary from strips of land to which the public has a title for highway purposes to highways open and available to vehicular traffic the year round. Because of the presence in northern Minnesota of so many roads that have legal status but are not actually utilized, field measurements might show the total mileage annually suitable for ordinary vehicular traffic to be as much as 5 percent below the totals that have been compiled.

Table 16 presents information on the mileages, by types, for rural highways. In 1933, 4,500 miles of highway were added to the State trunk system by legislative act, thus making a total of 11,272 miles of trunk routes now under the administration of the State highway department.

TABLE 16.—*Mileage and degree of improvement of rural highways in 1932*

System	Bituminous concrete and portland cement concrete		Bituminous-treated surface		Gravel		Earth		Total		Percentage of total
	Miles	Percent	Miles	Percent	Miles	Percent	Miles	Percent	Miles	Percent.	
State	2,407	35.5	2,460	36.3	1,839	27.2	66	1.0	6,772	100.0	6.1
County	115	.4	890	2.8	22,269	69.3	8,852	27.5	32,126	100.0	28.8
Township	2	(1)	21	(1)	22,624	31.2	49,930	68.8	72,577	100.0	65.1
Total	2,524	2.3	3,371	3.0	46,732	41.9	58,848	52.8	111,475	100.0	100.0

[1] Less than 0.1 percent.

HIGHWAY FUNDS OBTAINED FROM SEVERAL SOURCES

The construction and maintenance of roads and streets in Minnesota are financed from the proceeds of property taxes, motor-vehicle imposts, Federal-aid apportionments, and temporary and long-term borrowings. Federal funds in 1932 amounted to $4,457,200, of which $3,039,600 was regular Federal aid and $1,417,600 was from emergency appropriations.

Table 17 shows that, of the taxes used for highways in 1932, 48.7 percent came from the general property tax and 51.3 percent from motor-vehicle revenues. All of the special assessments were made by the local units of government.

The State property tax for highway purposes is a 1-mill levy, the proceeds of which are allocated to the counties for use upon State-aid roads.

The funds for the local township roads and the streets in villages and cities were derived from local sources entirely from levies against property. In the urban communities there were three general types of property imposts used for street purposes: (1) Special assessments; (2) property taxes levied specifically for highway purposes; and (3) property taxes levied for general fund purposes. The proceeds from this last type of levy were not specifically designated as highway taxes, but highway costs were met out of them.

Motor-vehicle registration fees.—Minnesota is one of the few States that tax motor vehicles on the basis of valuation. Vehicles for which this tax is paid are exempt from the regular tax on personal property. Unregistered vehicles in the hands of dealers are subject to the personal property tax, however.

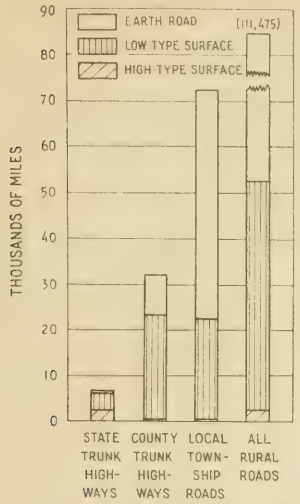
TABLE 17.—*Taxation imposed for street and highway purposes in 1932*

Type of tax	Amount	Percentage of subtotal	Percentage of total	Per capita
On general property by—				
State	$1,884,200	9.7	4.7	$0.73
County	7,757,000	40.2	19.6	3.03
Local	6,619,900	34.3	16.7	2.58
Special assessments	3,052,900	15.8	7.7	1.19
Total property taxes	19,314,000	100.0	48.7	7.53
On motor vehicles as—				
Registration fees [1]	10,019,600	49.2	25.2	3.91
Fuel taxes	10,000,600	49.1	25.2	3.90
Other fees	347,900	1.7	.9	.14
Total motor-vehicle fees	20,368,100	100.0	51.3	7.95
Grand total	39,682,100		100.0	15.48

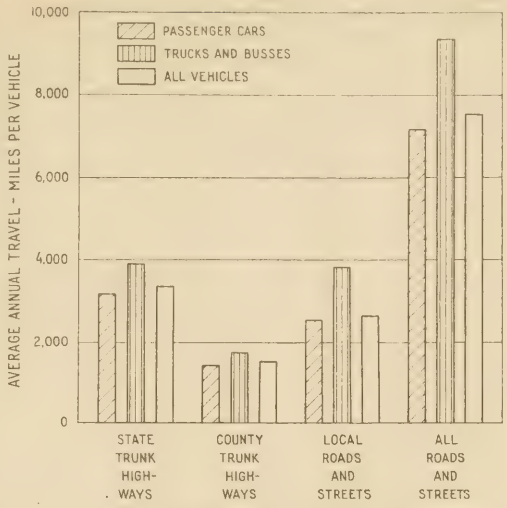
[1] Includes $32,700 nonresident fees.

A total of $10,019,600 in registration fees was collected in 1932. Minnesota residents paid $9,986,900 of this amount and out-of-State residents contributed $32,700. The cost of collecting the registration fees was $367,000 or 3.7 percent of the total gross receipts. This was 52 cents per vehicle registered. The withdrawal from the highway fund was $420,000 for this cost. Of the total proceeds, $2,418,900 was committed to retire trunk highway bonds and to pay the interest on this debt. Only $7,180,700, therefore, remained for use by the State highway department on the trunk highways.

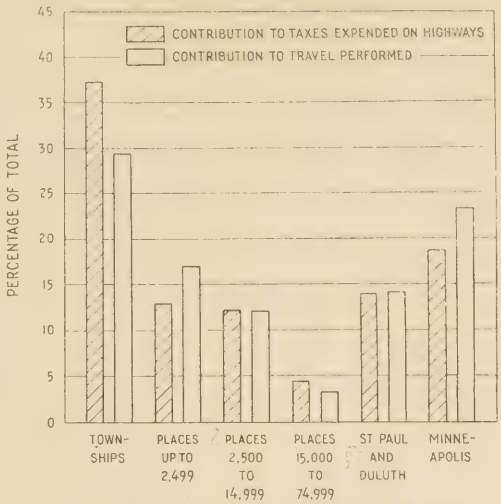
The motor-vehicle license fee data were obtained from records in the State offices. A representative sample of registrations was listed and analyzed, and questionnaires were sent to motor-vehicle owners to



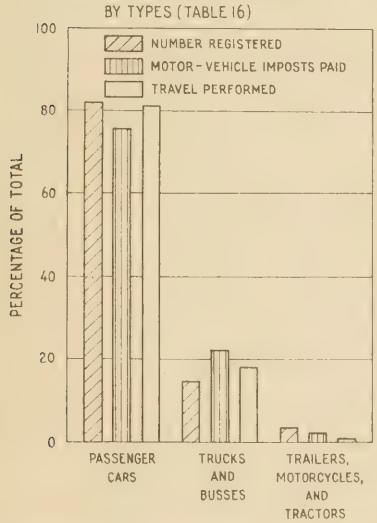
TOTAL MILEAGE OF RURAL HIGHWAY SYSTEMS AND SURFACED MILEAGE BY TYPES (TABLE 16)



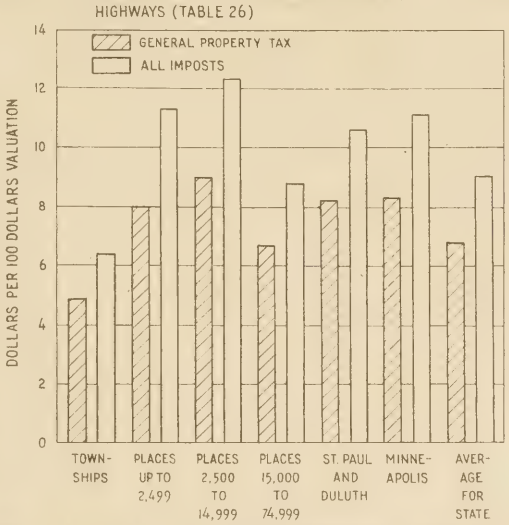
AVERAGE ANNUAL TRAVEL PER VEHICLE OF PASSENGER CARS, AND TRUCKS AND BUSSES ON THE VARIOUS CLASSES OF HIGHWAYS (TABLE 26)



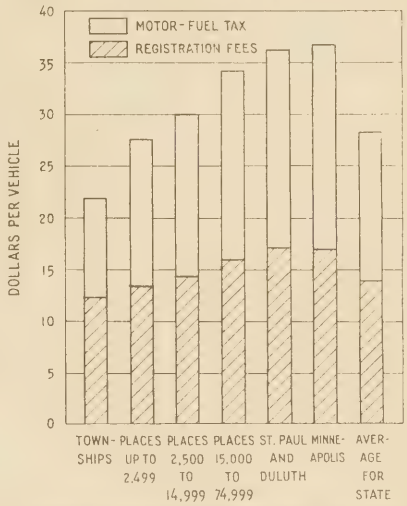
RELATIONS BETWEEN INCIDENCE OF TAXES EXPENDED ON HIGHWAYS AND TRAVEL PERFORMED BY THE RESIDENTS OF THE SEVERAL CLASSES OF LOCAL UNITS (TABLES 18 AND 21)



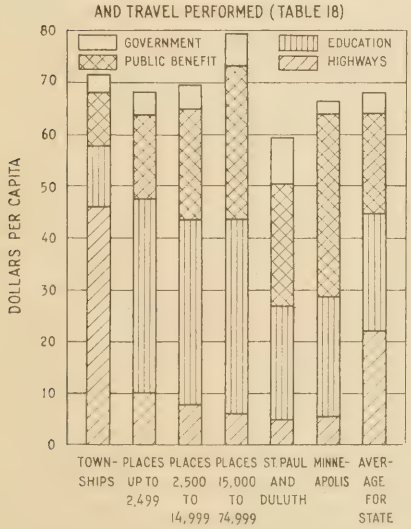
PERCENTAGE DISTRIBUTION OF ALL VEHICLES BY NUMBER REGISTERED, MOTOR-VEHICLE IMPOSTS PAID, AND TRAVEL PERFORMED (TABLE 18)



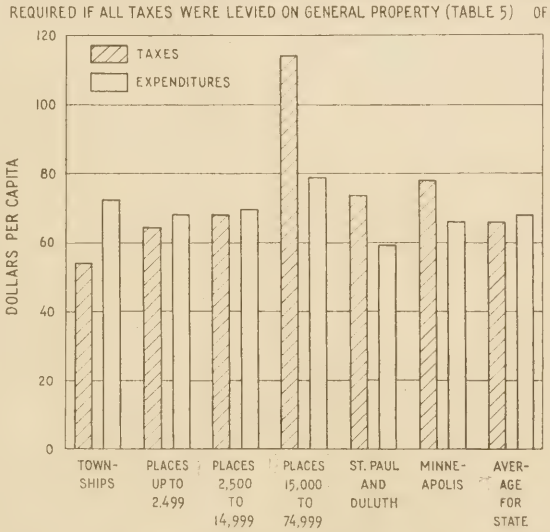
AVERAGE TAX RATES ON GENERAL PROPERTY IN THE SEVERAL CLASSES OF LOCAL UNITS AND IN THE STATE AS A WHOLE, AND RATES REQUIRED IF ALL TAXES WERE LEVIED ON GENERAL PROPERTY (TABLE 5)



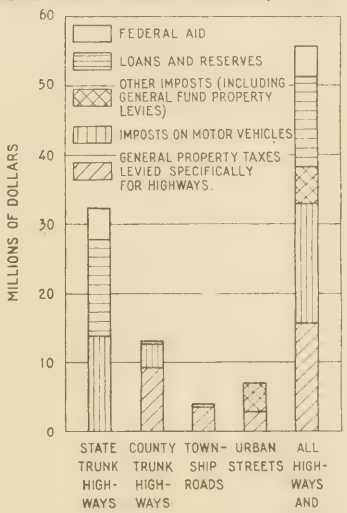
AVERAGE REGISTRATION FEES & MOTOR-FUEL TAXES PAID BY MOTOR-VEHICLE OWNERS RESIDENT IN THE SEVERAL CLASSES OF LOCAL UNITS AND IN THE STATE AS A WHOLE (TABLE 18)



PER CAPITA EXPENDITURES BY PURPOSE IN THE SEVERAL CLASSES OF LOCAL UNITS AND IN THE STATE AS A WHOLE (TABLE 9)



PER CAPITA TAXES AND EXPENDITURES IN THE SEVERAL CLASSES OF LOCAL UNITS AND IN THE STATE AS A WHOLE (TABLE 10)



TOTAL EXPENDITURES ON HIGHWAY SYSTEMS AND STREETS SHOWING SOURCES OF FUNDS (TABLE 21)

Graphical Summary of Essential Facts Disclosed by Survey of Minnesota Finances in 1932.

51188—36——2

TABLE 18.—*Comparison of the several classes of local governmental units as to motor-vehicle imposts paid, population, number of vehicles registered, and contribution to total travel*

Places of ownership	Population		Motor vehicles registered [1]		Persons per vehicle	Total registration fees [2]		Registration fee per vehicle	Total motor-fuel taxes		Motor-fuel tax per vehicle	Total motor-vehicle imposts [3]	Contribution to total travel
	Number	Percentage of total	Number	Percentage of total		Amount	Percentage of total		Amount	Percentage of total			
Townships:													*Vehicle-miles*
Passenger cars			226,947	39.1	4.3	$2,842,300	35.9	$12.52	$2,078,600	27.6	$9.16	$2,920,900	1,221,700,000
Trucks and busses			41,329	40.8	23.4	509,700	25.5	12.33	675,400	27.3	16.34	1,185,100	288,400,000
Other vehicles			12,326	53.5	78.4	31,500	42.7	2.56				170,000	
Total	966,819	37.7	280,602	39.8	3.4	3,383,500	33.9	12.06	2,754,000	27.5	9.81	6,276,000	1,510,100,000
Places to 2,499:													
Passenger cars			94,516	16.3	3.6	1,246,700	15.8	13.19	1,222,300	16.3	12.93	2,469,000	716,600,000
Trucks and busses			14,572	14.4	23.3	280,000	14.1	19.21	342,800	13.8	23.52	622,800	161,000,000
Other vehicles			4,498	19.6	75.5	15,900	21.6	3.53				71,900	
Total	339,518	13.2	113,586	16.1	3.0	1,542,600	15.4	13.58	1,565,100	15.7	13.78	3,163,700	877,600,000
Places 2,500 to 14,999:													
Passenger cars			69,264	11.9	4.9	931,600	11.8	13.45	956,100	12.7	13.80	1,887,700	507,500,000
Trucks and busses			11,520	11.4	29.7	269,900	13.5	23.43	320,200	12.9	27.80	590,100	119,700,000
Other vehicles			2,281	9.9	150.0	10,000	13.6	4.38				51,000	
Total	342,054	13.3	83,065	11.8	4.1	1,211,500	12.1	14.58	1,276,300	12.8	15.37	2,528,800	627,200,000
Places 15,000 to 74,999:													
Passenger cars			15,038	2.6	5.2	216,700	2.7	14.41	251,200	3.3	16.70	467,900	133,400,000
Trucks and busses			3,984	3.9	19.6	92,400	4.6	23.19	107,900	4.4	27.08	200,300	42,800,000
Other vehicles			460	2.0	169.9	1,300	1.8	2.83				10,900	
Total	78,137	3.1	19,482	2.8	4.0	310,400	3.1	15.93	359,100	3.6	18.43	679,100	176,200,000
St. Paul and Duluth:													
Passenger cars			70,109	12.1	5.3	1,064,300	13.4	15.18	1,132,100	15.1	16.15	2,196,400	577,900,000
Trucks and busses			14,487	14.3	25.8	392,400	19.6	27.09	491,300	19.8	33.91	883,700	159,600,000
Other vehicles			998	4.3	373.8	5,000	6.8	5.01				47,300	
Total	373,069	14.6	85,594	12.1	4.4	1,461,700	14.6	17.08	1,623,400	16.2	18.97	3,127,400	737,500,000
Minneapolis:													
Passenger cars			104,675	18.0	4.4	1,612,700	20.4	15.41	1,883,800	25.0	18.00	3,496,500	1,023,200,000
Trucks and busses			15,426	15.2	30.1	454,500	22.7	29.46	538,900	21.8	34.93	993,400	179,900,000
Other vehicles			2,466	10.7	188.3	10,000	13.6	4.06				70,500	
Total	464,356	18.1	122,567	17.4	3.8	2,077,200	20.8	16.95	2,422,700	24.2	19.77	4,560,400	1,203,100,000
State total:													
Passenger cars			580,549	100.0	4.4	7,914,300	100.0	13.63	7,524,100	100.0	12.96	15,438,400	4,180,300,000
Trucks and busses			101,318	100.0	25.3	1,998,900	100.0	19.73	2,476,500	100.0	24.44	4,475,400	951,400,000
Other vehicles			23,029	100.0	111.3	73,700	100.0	3.20				421,600	
Total	2,563,953	100.0	704,896	100.0	3.6	9,986,900	100.0	14.17	10,000,600	100.0	14.19	20,335,400	5,131,700,000

[1] Registered by Minnesota residents. [2] Paid by Minnesota residents only. [3] Includes $347,900 of miscellaneous motor-vehicle revenues.

determine the exact allocation of motor vehicles in the rural areas and several classes of urban places. The questionnaires covered the situs of ownership in the year 1934 but the results were applied to 1932 registration figures. On the basis of the records and the replies to the questionnaires, the distribution shown in table 18 was made.

There were 706,186 motor vehicles registered in Minnesota in 1932, of which 704,896 were registered by Minnesota residents and 1,290 by nonresidents. Of the resident vehicles, 82.4 percent or 580,549 were passenger cars, 14.4 percent or 101,318 were trucks and busses, and 3.2 percent or 23,029 were other vehicles such as trailers, motorcycles, and tractors.

Approximately 40 percent of the motor vehicles were registered in the rural areas and paid 33.9 percent of the registration fees. This amounted to $12.06 per vehicle. The registration fees in the urban areas amounted to $6,603,400 or $15.56 per vehicle licensed. As the size of place increased the average license fee paid increased. The average fee per motor vehicle in Duluth, St. Paul, and Minneapolis was $17. The difference in fees is attributed to the fact that the less valuable cars tend to be registered in the rural areas. The trend is even more pronounced when the data for passenger cars and trucks and busses are analyzed separately. It is also interesting to note that the spread between the average fee paid for passenger cars and that paid for trucks and busses tended to increase as the size of the place increased.

Motor-fuel tax.—Minnesota collects a fuel tax of 3 cents per gallon on gasoline consumed by vehicles operating on the highways. Refunds are allowed for nonhighway use. The figures shown in table 18 are the net amounts collected. Collections are made by oil inspectors of the State department of agriculture, dairy, and food. Two-thirds of the net amount collected is given to the State highway department for use on the trunk highway system and one-third is given to the counties for use on the county-aid roads.

Of the State road and bridge funds that are apportioned to the counties, not less than 20 percent must be used for maintenance. While the apportionments under the State-aid act may vary from 1 percent to 3 percent of the total funds available, the statutes do not specify the determining factors as to the amount that may be made available. There is also an indefinite provision relating to the apportionment of the gasoline tax funds. While no less than 0.75 percent, and no more than 3 percent, may be apportioned to any one county, the method of apportionment is simply that "* * * in the making of such apportionment regard

shall be had to the mileage of county and town roads and the traffic needs and conditions of the respective counties."

The State-aid funds paid out of the State property tax are utilized for certain county roads known as State-aid roads. The allotment of gasoline tax money to the counties is used in connection with funds raised by the towns on roads primarily having the characteristics of local rural highways, although they are designated as county-aid roads and are generally treated in the same classification as other county roads.

The cost of collecting the motor-fuel taxes was only $14,100, or 0.14 percent of the gross receipts. The cost amounted to 2 cents per vehicle.

After deducting the amount paid to the State road and bridge fund for apportionment to the counties, there remained $6,651,000 for use on State trunk routes.

To determine the incidence of the motor-fuel tax, questionnaires were sent to 22,000 motor-vehicle owners selected at random. The questionnaire requested the owner to give information regarding the average annual travel performed, the amount of gasoline consumed, and the average number of miles obtained per gallon.

The replies were analyzed and from them a distribution of motor-fuel taxes was made. Table 18 contains a tabulation of the results.

The rural areas paid 33.9 percent of the motor-vehicle registration fees and 27.5 percent of the gasoline taxes. The gasoline taxes amounted to $9.81 per vehicle. As was the case with motor-vehicle registration fees, the gasoline tax per vehicle increases as the size of place increases. Minneapolis motor-vehicle owners paid $19.77 per vehicle in gasoline taxes, and St. Paul and Duluth vehicle owners paid $18.97. This trend is explained as follows: Because of traffic conditions, the automobiles in urban areas get less mileage per gallon; the heavier vehicles are concentrated in the cities; and the average number of miles traveled annually is greater for vehicles owned in the cities.

Other motor-vehicle imposts.—Miscellaneous motor-vehicle imposts total $347,900. These imposts include minor charges against motor-vehicle owners such as chauffeurs' licenses, duplicate plates, property tax on motor vehicles in the hands of dealers, and similar charges.

Table 18 presents interesting data regarding motor-vehicle fees, and for purposes of comparison shows in addition population, registration, and travel data for the various places.

FIFTY-EIGHT PERCENT OF ALL HIGHWAY EXPENDITURES MADE ON STATE TRUNK SYSTEM

The contributions in 1932 by residents of the rural and urban areas to the costs of the highway program are shown in table 19. The table shows the total amounts that residents in each class of place contributed, both in State and local revenues. The proportion each impost bears to the total taxes levied can also be seen from this table.

Tables 20 and 21 show the sources of revenue for road and street purposes classified by type of revenue and by contributing agency. The highway systems upon which the revenues were used are also shown. These tables summarize all information on the sources of highway imposts and the highway systems upon which they were expended.

EIGHTY PERCENT OF ALL ROAD AND STREET EXPENDITURES MADE ON RURAL ROADS

Sufficient data have been obtained so that the figures on road costs for the State, county, and townships are reasonably accurate. The total expenditures for city streets were also obtained, but very little information was found concerning the respective amounts spent for construction and maintenance. For this reason it has been deemed inadvisable to estimate the proportionate amounts spent for these purposes.

Table 22 shows that of the total of $55,732,600 spent for highways in 1932, $32,149,900 or 57.7 percent was expended by the State;[2] $12,720,700 or 22.8 percent was expended by the counties; and the remainder, $10,862,000 or 19.5 percent, was expended by the local communities for rural roads and urban streets.

The amount spent on the State trunk highways includes expenditures on the urban as well as the rural portions of the trunk routes. About 11.5 percent or $3,712,100 was spent on the State trunk routes in corporate limits. Of the total of $32,149,900 spent on trunk routes, $26,299,500 or 81.8 percent was spent for construction, $3,818,400 or 11.9 percent for maintenance, and $2,032,000 or 6.3 percent for overhead.

[2] Differences will be found between some of the figures contained in this report and figures previously released by the Bureau. The same basic figures were used in preparing the Bureau's previous reports, reports made by the Minnesota State Highway Department, and this financial survey, but there are differences in their interpretation.

This report reflects the actual net costs during the year. In the official accounts there are often credits and charges for previous years carried over into the accounts of the current year and reflected in the annual financial statements of the highway department. Such transactions have been eliminated in this survey.

TABLE 19.—*Incidence of taxation for street and highway purposes*

Paid by taxpayers in—	Type of impost										Total	
	Motor-fuel tax		Registration fees [1]		Other motor-vehicle imposts		Special assessments		Property tax			
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Townships	$2,754,000	27.5	$3,396,600	33.9	$138,500	39.8			$10,590,900	65.1	$16,880,000	42.5
Places to 2,499	1,565,100	15.7	1,547,800	15.5	56,000	16.1	$221,400	7.3	1,563,600	9.6	4,953,900	12.5
Places 2,500 to 14,999	1,276,300	12.8	1,215,300	12.1	41,000	11.8	464,200	15.2	1,341,800	8.3	4,338,600	10.9
Places 15,000 to 74,999	359,100	3.6	311,300	3.1	9,600	2.8	101,600	3.3	729,900	4.5	1,511,500	3.8
St. Paul and Duluth	1,623,400	16.2	1,465,700	14.6	42,300	12.1	815,300	26.7	890,500	5.5	4,837,200	12.2
Minneapolis	2,422,700	24.2	2,082,900	20.8	60,500	17.4	1,450,400	47.5	1,144,400	7.0	7,160,900	18.1
Total	10,000,600	100.0	10,019,600	100.0	347,900	100.0	3,052,900	100.0	16,261,100	100.0	39,682,100	100.0
Percentage of total		25.2		25.2		.9		7.7		41.0		100.0

[1] Includes $32,700 of nonresident fees.

SNOW REMOVAL IS AN ITEM OF HIGHWAY MAINTENANCE EXPENDITURE.

TABLE 20.—*Funds expended on the several highway systems and the city streets in 1932, and the approximate amounts and percentages of these funds provided by imposts made by the various governmental units and by loan and reserve funds*

Highway system and form of revenue	Governmental agency providing funds					Percentage of total current tax funds	Percentage of total funds
	Federal Government	State	Counties	Local governments	Total		
State trunk system:							
Loans and reserves		$13,861,000			$13,861,000		
Current taxes	$4,457,200	13,831,700			18,288,900	43.8	
Total	4,457,200	27,692,700			32,149,900		57.7
Percentage of total	13.9	86.1			100.0		
County highways:							
Loans and reserves			$94,600		94,600		
Current taxes		5,219,700	7,406,400		12,626,100	30.3	
Total		5,219,700	7,501,000		12,720,700		22.8
Percentage of total		41.0	59.0		100.0		
Local township roads:							
Loans and reserves				$43,500	43,500		
Current taxes				3,850,800	3,850,800	9.2	
Total				3,894,300	3,894,300		7.0
Percentage of total				100.0	100.0		
City streets:							
Loans and reserves							
Current taxes				6,967,700	6,967,700	16.7	
Total				6,967,700	6,967,700		12.5
Percentage of total				100.0	100.0		
All roads and streets:							
Loans and reserves		13,861,000	94,600	43,500	13,999,100		
Current taxes	4,457,200	19,051,400	7,406,400	10,818,500	41,733,500	100.0	
Total	4,457,200	32,912,400	7,501,000	10,862,000	55,732,600		100.0
Percentage of total	8.0	59.0	13.5	19.5	100.0		

TABLE 21.—*Approximate amounts of the 1932 taxes and imposts expended on the current highway and street program listed according to highway system, type of tax, and class of local unit in which the tax is paid*

IMPOSTS ON GENERAL PROPERTY LEVIED SPECIFICALLY FOR HIGHWAYS

Paid by taxpayers in—	Highway system										
	State trunk		County trunk		Township		Urban streets		All highways and streets		
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Percentage of total
Townships			$4,830,000	55.6	$3,850,800	44.4			$8,680,800	100.0	54.8
Places to 2,499			1,295,700	70.1			$551,600	29.9	1,847,300	100.0	11.6
Places 2,500 to 14,999			1,125,400	64.1			631,000	35.9	1,756,400	100.0	11.1
Places 15,000 to 74,999			664,600	65.8			345,300	34.2	1,009,900	100.0	6.4
St. Paul and Duluth			865,500	59.8			581,600	40.2	1,447,100	100.0	9.1
Minneapolis			509,400	45.9			600,600	54.1	1,110,000	100.0	7.0
Total			9,290,600	58.6	3,850,800	24.3	2,710,100	17.1	15,851,500	100.0	100.0

IMPOSTS ON MOTOR VEHICLES

Townships	$4,263,300	82.3	$917,300	17.7					$5,180,600	100.0	30.2
Places to 2,499	2,157,200	80.5	523,700	19.5					2,680,900	100.0	15.6
Places 2,500 to 14,999	1,720,200	80.1	426,900	19.9					2,147,100	100.0	12.5
Places 15,000 to 74,999	462,000	79.4	120,100	20.6					582,100	100.0	3.4
St. Paul and Duluth	2,125,900	79.7	540,300	20.3					2,666,200	100.0	15.5
Minneapolis	3,103,100	79.4	807,200	20.6					3,910,300	100.0	22.8
Total	13,831,700	80.6	3,335,500	19.4					17,167,200	100.0	100.0

OTHER IMPOSTS (INCLUDING GENERAL FUND PROPERTY LEVIES)

Townships											
Places to 2,499							$310,800	100.0	$310,800	100.0	7.3
Places 2,500 to 14,999							647,200	100.0	647,200	100.0	15.2
Places 15,000 to 74,999							140,500	100.0	140,500	100.0	3.3
St. Paul and Duluth							1,136,700	100.0	1,136,700	100.0	26.7
Minneapolis							2,022,400	100.0	2,022,400	100.0	47.5
Total							4,257,600	100.0	4,257,600	100.0	100.0

ALL TAXES AND IMPOSTS

Townships	$4,263,300	30.7	$5,747,300	41.5	$3,850,800	27.8			$13,861,400	100.0	37.2
Places to 2,499	2,157,200	44.6	1,819,400	37.6			$862,400	17.8	4,839,000	100.0	13.0
Places 2,500 to 14,999	1,720,200	37.8	1,552,300	34.1			1,278,200	28.1	4,550,700	100.0	12.2
Places 15,000 to 74,999	462,000	26.7	784,700	45.3			485,800	28.0	1,732,500	100.0	4.6
St. Paul and Duluth	2,125,900	40.5	1,405,800	26.8			1,718,300	32.7	5,250,000	100.0	14.1
Minneapolis	3,103,100	44.1	1,316,600	18.7			2,623,000	37.2	7,042,700	100.0	18.9
Total	13,831,700	37.1	12,626,100	33.9	3,850,800	10.3	6,967,700	18.7	37,276,300	100.0	100.0
Federal aid	4,457,200	100.0							4,457,200	100.0	
Loans and reserves	13,861,000	99.0	94,600	0.7	43,500	0.3			13,999,100	100.0	
Grand total	32,149,900	57.7	12,720,700	22.8	3,894,300	7.0	6,967,700	12.5	55,732,600	100.0	

TABLE 22.—*Highway and street expenditures in 1932, including prorated overhead costs*

Expended by—	Amount	Percent	Expended on—	
			Rural roads	Urban streets
State (State system)	$32,149,900	57.7	$28,437,800	$3,712,100
Counties (county system)	12,720,700	22.8	12,191,000	529,700
Townships	3,894,300	7.0	3,894,300	
Places to 2,499	862,400	1.5		862,400
Places 2,500 to 14,999	1,278,200	2.3		1,278,200
Places 15,000 to 74,999	485,800	.9		485,800
St. Paul and Duluth	1,718,300	3.1		1,718,300
Minneapolis	2,623,000	4.7		2,623,000
Total	55,732,600	100.0	44,523,100	11,209,500

TABLE 23.—*Construction and maintenance expenditures in 1932 on the State trunk system, in both rural and urban areas* [1]

Section of State trunk system	Construction		Maintenance		Construction and maintenance	
	Amount	Percent	Amount	Percent	Amount	Percent
Rural	$23,204,200	88.2	$3,413,600	89.4	$26,617,800	88.4
Urban	3,095,300	11.8	404,800	10.6	3,500,100	11.6
Total	26,299,500	100.0	3,818,400	100.0	30,117,900	100.0

[1] Interest, engineering, supervision, and other undistributed overhead costs are not included.

Table 23 shows the expenditures on the rural and urban portions of the State trunk system divided between construction and maintenance. The expenditures for general administration and other overhead are not included.

Expenditures for construction include costs of planning and engineering, grading, draining, surfacing, and the machinery used in connection with construction work. Expenditures for the construction of bridges and grade separations and reconstruction are also included. The costs of engineering, patching, patroling, machinery, marking, and temporary improvements such as light oiling and regraveling comprise the maintenance expenditures.

All engineering costs and highway department salaries that cannot be definitely allocated to construction

or maintenance are included in overhead expenditures. The cost of administering the motor-fuel taxes, interest payments on bonds (but not principal payments), and damages and claims are also overhead expenditures.

Of the $12,720,700 spent by county governments for highways in both urban and rural areas, $5,181,000, or 40.7 percent, was for construction; $5,700,500, or 44.8 percent, was for maintenance, and $1,839,200, or 14.5 percent, was for overhead.

The counties spent $529,700, or 4.2 percent, of the total spent on the urban portions of the county roads (table 22).

Township expenditures for local rural roads were $3,894,300. The construction costs were $2,697,300, or 69.3 percent; the maintenance costs were $1,097,400, or 28.2 percent; and the overhead costs were $99,600, or 2.5 percent. The expenditures by urban places on streets were $6,967,700 (table 22).

The annual travel on the various highway systems was determined by the road-use survey. The total expenditures on the several highway systems reduced to cost per vehicle-mile are shown in table 24.

TABLE 24.—*Highway expenditures per vehicle-mile of travel in 1932 on the several systems of roads as determined by the Minnesota road-use survey*

Highway system	Highway expenditures per vehicle-mile	Annual travel
	Cents	*Vehicle-miles*
State system	1.4	2,276,400,000
County roads	1.3	1,016,500,000
Township roads	1.3	311,200,000
City streets	.5	1,527,600,000
All highways	1.1	5,131,700,000

HIGHWAY TAXES AND EXPENDITURES COMPARED

Expenditures by the State and counties are made for the benefit of residents in both the rural and urban areas. The total highway expenditure in these areas, therefore, is the sum of the State and county highway expenditures plus the amount spent by the locality itself.

The total amount spent for highways in the rural areas of the State was $44,523,100, or 79.9 percent, of the total. The balance, $11,209,500, was spent in the urban places. Table 25 shows the allocation of highway expenditures and highway taxes by the several local units of government. In the entire State the highway expenditures were 40 percent more than the taxes collected for them.

The outstanding highway debt of all governmental units in Minnesota in 1932 was $95,051,900. The

TABLE 25.—*Comparison of street and highway taxes and expenditures in 1932 by places*

Type of place	Street and highway taxes paid		Street and highway expenditures		Ratio of expenditures to taxes
	Amount	Percent	Amount	Percent	
Townships	$16,880,000	42.5	$44,523,100	79.9	2.64
Places to 2,499	4,953,900	12.5	3,417,600	6.1	.69
Places 2,500 to 14,999	4,338,600	10.9	2,808,800	5.0	.65
Places 15,000 to 74,999	1,511,500	3.8	537,400	1.0	.36
St. Paul and Duluth	4,837,200	12.2	1,822,700	3.3	.38
Minneapolis	7,160,900	18.1	2,623,000	4.7	.37
Total	39,682,100	100.0	55,732,600	100.0	1.40

TABLE 26.—*Average number of miles traveled per vehicle on the highway systems and local streets of Minnesota by Minnesota motor vehicles in 1932*

Place of ownership and type of vehicle	State trunk highways	County trunk highways	Local roads and streets	Total
	Miles per vehicle	*Miles per vehicle*	*Miles per vehicle*	*Miles per vehicle*
Townships:				
Passenger cars	2,202	2,315	866	5,383
Trucks and busses	3,329	2,491	1,158	6,978
All vehicles	2,375	2,342	912	5,629
Percentage of total	42.2	41.6	16.2	100.0
Places to 2,499:				
Passenger cars	4,602	1,858	1,122	7,582
Trucks and busses	5,735	2,762	2,552	11,049
All vehicles	4,755	1,979	1,311	8,045
Percentage of total	59.1	24.6	16.3	100.0
Places 2,500 to 14,999:				
Passenger cars	4,404	1,077	1,846	7,327
Trucks and busses	4,686	1,611	4,094	10,391
All vehicles	4,441	1,157	2,166	7,764
Percentage of total	57.2	14.9	27.9	100.0
Places 15,000 to 74,999:				
Passenger cars	4,799	825	3,247	8,871
Trucks and busses	2,815	1,504	6,424	10,743
All vehicles	4,381	973	3,909	9,263
Percentage of total	47.3	10.5	42.2	100.0
St. Paul and Duluth:				
Passenger cars	2,720	264	5,259	8,243
Trucks and busses	3,349	231	7,437	11,017
All vehicles	2,824	262	5,632	8,718
Percentage of total	32.4	3.0	64.6	100.0
Minneapolis:				
Passenger cars	3,626	362	5,787	9,775
Trucks and busses	3,860	35	7,767	11,662
All vehicles	3,656	321	6,040	10,017
Percentage of total	36.5	3.2	60.3	100.0
State total				
Passenger cars	3,240	1,455	2,506	7,201
Trucks and busses	3,897	1,690	3,803	9,390
All vehicles	3,342	1,490	2,694	7,526
Percentage of total	44.4	19.8	35.8	100.0

TABLE 27.—*Percentage distribution of travel on the various highway systems in Minnesota in 1932 provided by vehicles in the various classes of places*

DISTRIBUTION BY PLACE OF ORIGIN OF TRAFFIC

Unit of government where traffic originated	Highway system on which travel was performed			
	State system	County roads	Local roads and streets	All highways
	Percent	*Percent*	*Percent*	*Percent*
Townships	28.0	61.8	13.3	29.4
Places to 2,499	22.8	21.2	7.8	17.1
Places to 2,500 to 14,999	15.8	9.2	9.5	12.2
Places 15,000 to 74,999	3.6	1.8	4.0	3.4
St. Paul and Duluth	10.5	2.2	25.9	14.4
Minneapolis	19.3	3.8	39.5	23.5
Total	100.0	100.0	100.0	100.0

DISTRIBUTION BY HIGHWAY SYSTEM ON WHICH TRAVEL WAS PERFORMED

Townships	42.2	41.6	16.2	100
Places to 2,499	59.1	24.6	16.3	100
Places 2,500 to 14,999	57.2	14.9	27.9	100
Places 15,000 to 74,999	47.3	10.5	42.2	100
St. Paul and Duluth	32.4	3.0	64.6	100
Minneapolis	36.5	3.2	60.3	100
Total	44.4	19.8	35.8	100

State accounted for $42,759,200 or 45 percent of the total; the counties accounted for $16,430,100 or 17.3 percent; the cities of Minneapolis, St. Paul, and Duluth accounted for $30,041,300 or 31.6 percent;

and the townships and smaller municipalities accounted for $5,821,300 or 6.1 percent. Twenty-nine million dollars of trunk highway bonds and $13,759,200 of county highway reimbursement bonds assumed by the State comprise the State highway debt. The county highway debt was contracted to provide through traffic facilities to supplement the State trunk system. Hennepin and Ramsey counties alone incurred $10,922,200 or 66.4 percent of the total county highway indebtedness.

The townships bonded themselves to the extent of $1,233,300 or 3.4 percent of the local debt for highways. Minneapolis, St. Paul, and Duluth incurred 83.8 percent of the total local rural and urban highway debt. As the size of place increases the demand for transportation facilities increases. This fact is reflected in per-capita debts for highway purposes which range from $1.28 in the townships to $40.28 in Minneapolis.

Highway debt service in 1932 was $8,487,200, of which $4,085,000 was for interest and $4,402,200 for principal payments. The State paid $4,150,800, of which $1,713,900 was for interest and $2,418,900 for principal. The counties spent $1,284,400, of which $739,300 was for interest and $545,100 for principal. The various other units spent $3,052,000, of which $1,613,800 was for interest and $1,438,200 for debt retirement.

Part of the motor-vehicle registration fees are impounded for the payment of interest and principal on the State highway debt. The debt service of other units of government is paid from property tax receipts.

RELATIONS BETWEEN HIGHWAY TAXES PAID, HIGHWAY EXPENDITURES, AND TRAVEL

The total mileage of rural highways in Minnesota in 1932 was 111,475. The State highway system consisted of 6,772 miles; the county highway system contained 32,126 miles; and the local township roads consisted of 72,577 miles. No data are available on mileage of village and city streets.

The total travel (exclusive of travel by out-of-State vehicles) on all roads and streets in Minnesota during the year 1932 was over 5 billion vehicle-miles, of which 29.4 percent was performed by vehicles of rural ownership; 17.1 percent by vehicles owned in incorporated places having a population to 2,499; 12.2 percent by vehicles owned in places 2,500 to 14,999 population; 3.4 percent by vehicles owned in places 15,000 to 74,999; 14.4 percent by vehicles owned in St. Paul and Duluth; and 23.5 percent by vehicles owned in Minneapolis.

Expenditures on the State highway system in 1932 were $32,149,900; on the county system, $12,720,700; on local township roads, $3,894,300; and on city streets, $6,967,700.

Of the total property taxes expended on all roads and streets, 58.6 percent was expended on county highways, 24.3 percent on the local township roads, and 17.1 percent on urban streets.

Of the total motor-vehicle taxes expended on all roads and streets, 80.6 percent was expended on State trunk highways, 19.4 percent on county trunk highways, and none on urban streets.

Of all taxes and imposts expended on all roads and streets, rural property and motor-vehicle owners paid 36.8 percent, and travel by rural-owned vehicles made up 29.4 percent of the total travel on all roads and streets; city and village property and motor-vehicle owners paid 63.2 percent, and travel by city- and village-owned vehicles made up 70.6 percent of the total travel.

NEARLY TWO-THIRDS OF ALL MOTOR-VEHICLE TRAVEL PERFORMED ON STATE AND COUNTY TRUNK HIGHWAYS

Data regarding the average annual travel of motor vehicles have been developed from the gasoline tax questionnaires and the road-use survey. The road-use survey discloses further the approximate amount of travel upon the different highway systems in the several classes of localities and the origin of that travel.

The road-use survey is not a traffic count. For the information necessary to make the study, 7,500 personal interviews were made. Motor-vehicle, population, and occupation data were used as bases for the selection of a sample. The obtaining of an accurate cross-section was thus insured. During the work statistical checks were constantly made. The results obtained in one section were compared with those obtained in other sections and with the total; and the average mileages and gasoline consumption for specific localities obtained from the questionnaires used to allocate the gasoline taxes were compared with similar figures obtained from the interviews.

The extent of tourist and other travel by out-of-State vehicles was not disclosed by the road-use survey. It is estimated, however, that this constitutes but a small fraction of the total traffic and is almost entirely on the State system.

Minnesota motor vehicles in 1932 traveled approximately 5,131,700,000 vehicle miles upon all highways in the State. Of this mileage traveled, 2,276,400,000 miles or 44.4 percent was upon the State trunk routes, 1,016,500,000 or 19.8 percent upon county roads, 311,200,000 or 6.1 percent upon local town roads, and 1,527,600,000 or 29.7 percent was upon urban streets.

Of the total travel, 4,180,300,000 vehicle-miles was the travel by passenger cars and 951,400,000 vehicle-miles the travel by trucks and busses.

In table 26 the figures for the travel performed by passenger cars and by trucks and busses owned in the several classes of places upon the State, county, and local roads are shown as the average annual miles per vehicle. It is evident that: (1) Trucks and busses travel more than do passenger cars; (2) urban-owned vehicles travel more than do rural-owned vehicles; (3) the amount of travel tends to increase as the size of place increases; and (4) almost half of the total travel was upon State trunk highways.

Table 27 expresses in percentages the origin of travel on the various highway systems. From this table it is seen that the primary use of the county roads is by rural residents. The extensive use of the State system by the vehicles of all communities is again emphasized. Table 27 also gives the percentage of travel divided among the highway systems upon which it was performed.

Common-carrier vehicles do not contribute heavily to the total travel on Minnesota highways. Data concerning the travel of all motor vehicles under the jurisdiction of the Minnesota Railroad and Warehouse Commission were analyzed and tabulated. This travel accounts for only about 18,800,000 vehicle-miles, or 0.4 percent of a total of over 5,000,000,000 vehicle-miles.

TRAVEL PER VEHICLE GREATEST FOR VEHICLES OWNED IN LARGE CITIES

From the gasoline tax questionnaires and the road-use interviews the average gallons of gasoline purchased annually in the State by Minnesota motor-vehicle owners were computed. Table 28 shows this tabulation in detail. The gasoline consumption per vehicle increases as the size of place increases and the average for trucks and busses is higher than for passenger cars.

TABLE 28.—*Average annual travel and gasoline consumption per vehicle in 1932 by place of ownership*

Place of ownership	Average annual gasoline consumption by—			Average annual travel by—		
	Passenger cars	Trucks and busses	All vehicles	Passenger cars	Trucks and busses	All vehicles
	Gallons per vehicle	*Gallons per vehicle*	*Gallons per vehicle*	*Miles per vehicle*	*Miles per vehicle*	*Miles per vehicle*
Townships	345	616	370	5,383	6,978	5,629
Places to 2,499	487	886	519	7,582	11,049	8,045
Places 2,500 to 14,999	520	1,048	579	7,327	10,391	7,764
Places 15,000 to 74,999	629	1,020	694	8,871	10,743	9,263
St. Paul and Duluth	608	1,277	714	8,243	11,017	8,718
Minneapolis	678	1,315	745	9,775	11,662	10,017
Entire State	488	921	534	7,201	9,390	7,526

Table 29 presents in concise form the relations existing between the various classes of places with respect to five of the major sets of facts determined by this survey.

Table 30 presents more clearly the relation between the taxes received and expenditures as finally made. The figures are based on results found in previous sections of the report. This table shows the source of each $1,000 in taxes by type of impost and by class of place responsible for its payment. Highway expenditures are further shown by highway system and source of revenue. It should not be inferred from this table that taxes equal expenditures or that the $1,000 unit is identical; the figures have been assembled on this basis only to facilitate comparisons between taxes and expenditures.

TABLE 29.—*Percentage distribution of population, motor-vehicle ownership, property valuation, taxes paid, and expenditures made in the several classes of places in 1932*

Class of place	Population	Motor-vehicle ownership	Taxable valuation	Total taxes paid	Total expenditures as made
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Townships	37.7	39.8	42.9	30.3	39.4
Places to 2,499	13.2	16.1	10.2	12.8	13.3
Places 2,500 to 14,999	13.3	11.8	10.2	13.8	13.6
Places 15,000 to 74,999	3.1	2.8	5.4	5.3	3.5
St. Paul and Duluth	14.6	12.1	13.7	16.2	12.7
Minneapolis	18.1	17.4	17.6	21.6	17.5
Total	100.0	100.0	100.0	100.0	100.0

SUMMARY

1. There were no expenditures of funds from general property taxes on State highways.
2. Rural property paid no tax for local urban streets and urban property paid no tax for local township roads.
3. Of the total rural property taxes expended for highway purposes—
   (*a*) 55.6 percent was expended on county trunk highways;
   (*b*) 44.4 percent was expended on local township roads.
4. Of the total property tax raised from urban communities and expended for street and highway purposes—
   (*a*) 62.2 percent was expended on county highways;
   (*b*) 37.8 percent was expended on urban streets.
5. Since, of the total assessed property valuation of $1,884,238,200, 42.9 percent or $808,798,600 was in rural areas, and 57.1 percent, or $1,075,439,600 was in the urban units—
   (*a*) Expenditures from property taxes for all highways and streets were at the following rates per $100 of assessed valuation:
   Rural—107.3 cents.
   Urban—66.7 cents.

TABLE 30.—*Comparison of taxation and expenditures in Minnesota in 1932*

$1,000 in taxes			$1,000 in expenditures				
Residents of—	Pay	In—	Division by purpose	Subdivision by highway system	Source of expenditures	Amount	Percent
Townships	$232.10	General property taxes, $751.12.	Education, $332.08.	State trunk highways, $183.25	Taxes paid in—		
Places to 2,499	90.89				Townships	$24.29	13.2
Places 2,500 to 14,999	101.40				Incorporated places	54.51	29.8
Places 15,000 to 74,999	40.56				Federal aid	25.47	13.9
St. Paul and Duluth	123.93				Loans and reserves	78.98	43.1
Minneapolis	162.24						
Townships	37.08	Motor-vehicle taxes, $119.99.	Highways, $317.59	County trunk highways, $72.41.	Taxes paid in—		
Places to 2,499	18.72				Townships	32.73	45.2
Places 2,500 to 14,999	14.88				Incorporated places	39.17	54.1
Places 15,000 to 74,999	3.96				Loans and reserves	.51	.7
St. Paul and Duluth	18.48						
Minneapolis	26.87						
			Public benefit, $283.51.	Township roads, $22.23	Taxes paid in—		
					Townships	21.99	98.9
					Incorporated places		
					Loans and reserves	.24	1.1
Townships	33.90	Miscellaneous taxes, $128.89.					
Places to 2,499	18.82						
Places 2,500 to 14,999	22.04						
Places 15,000 to 74,999	8.25						
St. Paul and Duluth	19.46						
Minneapolis	26.42						
			Government, $56.82.	Urban streets, $39.70	Taxes paid in—		
					Townships		
					Incorporated places	39.70	100.0
					Loans and reserves		

(*b*) Expenditures from property taxes for county highways were at the following rates per $100 valuation:
Rural—59.7 cents.
Urban—41.5 cents.

(*c*) Expenditures from property taxes for local township roads were at the following rates per $100 valuation:
Rural—47.6 cents.
Urban—No tax.

(*d*) Expenditures from property taxes for local urban streets were at the following rates per $100 valuation:
Rural—No tax.
Urban—25.2 cents.

6. Of the total property taxes expended on all roads—
(*a*) 58.6 percent was expended on county highways;
(*b*) 24.3 percent was expended on local township roads;
(*c*) 17.1 percent was expended on urban streets.

7. Of the total motor-vehicle imposts expended on all classes of roads and streets—
(*a*) Rural motor-vehicle owners paid 30.2 percent and contributed 29.4 percent of the total travel on all roads and streets;
(*b*) Urban motor-vehicle owners paid 69.8 percent and contributed 70.6 percent of the total travel.

8. Of the total motor-vehicle imposts expended on all classes of roads and streets—
(*a*) 80.6 percent was expended on the State trunk highways;
(*b*) 19.4 percent was expended on the county highways.

9. Of all taxes and imposts expended on all roads and streets—
(*a*) 37.1 percent was expended on State trunk highways;
(*b*) 33.9 percent was expended on county highways;
(*c*) 10.3 percent was expended on local township roads;
(*d*) 18.7 percent was expended on urban streets.

10. Of all taxes and imposts expended on all roads and streets—
(*a*) Rural property and motor-vehicle owners paid 36.8 percent and contributed 29.4 percent of the total travel on all roads and streets;
(*b*) City and village property and motor-vehicle owners paid 63.2 percent and contributed 70.6 percent of the travel.

STATUS OF FEDERAL AID HIGHWAY PROJECTS

(1936 FUNDS)

AS OF FEBRUARY 29, 1936

STATE	APPORTIONMENT	COMPLETED			UNDER CONSTRUCTION			APPROVED FOR CONSTRUCTION			BALANCE OF FUNDS AVAILABLE FOR NEW PROJECTS
		Estimated Total Cost	Federal Aid	Miles	Estimated Total Cost	Federal Aid	Miles	Estimated Total Cost	Federal Aid	Miles	
Alabama	$ 2,604,320										$ 2,604,320
Arizona	1,781,347	$ 158,857	$ 105,903	3.0	$ 1,722,376	$ 1,436,391	98.1	$ 53,440	$ 26,720		212,333
Arkansas	2,142,723										2,142,723
California	4,756,959	124,803	72,230	5.2	3,168,070	1,824,144	40.7	1,659,030	942,306	40.3	1,918,279
Colorado	2,288,811	25,046	14,026	.1	1,748,648	979,242	78.9	631,068	349,278	13.2	946,265
Connecticut	791,253							212,492	95,909	3.8	695,344
Delaware	609,375							483,982	240,196	38.2	369,179
Florida	1,655,723				674,678	337,339	23.8	218,968	109,484	8.8	1,208,900
Georgia	3,168,221				944,637	466,093	64.0	1,303,626	651,813	74.5	2,050,315
Idaho	1,531,162	292,520	164,327	44.6	1,255,005	748,902	121.4	223,546	133,753	6.5	484,180
Illinois	5,160,696				3,056,403	1,525,847	60.4	3,369,466	1,684,733	52.1	1,950,116
Indiana	3,087,613	244,757	122,373	6.9	3,605,195	1,798,745	118.0	2,175,968	1,087,838	66.3	78,657
Iowa	3,231,718	224,362	105,460	57.5	4,200,560	1,978,570	190.7	1,535,867	721,175	57.8	426,513
Kansas	3,317,054	10,829	5,414	6.7	616,918	308,459	117.3	2,702,993	1,351,496	262.0	1,651,685
Kentucky	2,304,143	604,406	302,203	39.4	1,513,322	737,079	99.9	1,501,798	716,618	40.2	548,243
Louisiana	1,776,939	107,553	53,776	3.7	1,353,102	676,551	49.2	864,378	432,189	30.3	614,423
Maine	1,090,167	113,605	56,802	2.1	1,504,065	752,033	49.6	94,663	47,332	1.9	234,000
Maryland	1,025,870										1,025,870
Massachusetts	1,741,877							396,055	198,028	3.1	1,543,849
Michigan	3,837,292	1,026,500	513,250	33.2	3,120,318	1,557,434	125.8	2,863,750	1,431,875	103.0	334,733
Minnesota	3,423,306	334,238	143,116	12.2	2,963,930	1,248,340	180.1	1,115,779	501,609	122.4	1,530,241
Mississippi	2,196,524										2,196,524
Missouri	3,800,856	1,176,793	588,396	221.1	3,177,814	1,588,907	121.2	356,013	178,007	27.8	1,445,546
Montana	2,560,449	691,680	387,272	141.9	1,007,050	563,847	84.3	1,918,771	1,074,319	146.5	535,011
Nebraska	2,581,663	1,116,878	558,439	66.5	644,552	341,638	68.2	11,054	5,527	5.2	1,676,059
Nevada	1,595,501	116,744	100,180	55.4	883,442	764,796	95.8	27,646	23,932		706,593
New Hampshire	609,375				672,702	330,042	20.9	22,459	11,192	1.1	268,141
New Jersey	1,675,751				1,474,928	737,464	26.4	1,972,969	899,954	13.9	38,333
New Mexico	1,999,299	159,058	96,739	18.4	1,877,956	1,148,308	144.2	417,651	284,004	13.0	470,248
New York	6,150,106				8,247,455	4,080,100	153.9	1,607,300	789,275	22.5	1,280,731
North Carolina	2,938,657				1,141,761	570,291	189.5	166,058	83,029	24.4	2,285,337
North Dakota	1,960,162										1,960,162
Ohio	4,565,435				1,053,782	526,792	11.3	3,026,800	1,512,200	40.6	2,526,443
Oklahoma	2,947,521				1,603,159	840,205	52.3	202,131	106,220	9.7	2,001,096
Oregon	2,044,633				2,347,733	1,419,720	87.5	846,944	516,636	17.0	108,277
Pennsylvania	5,348,062	60,985	30,493	1.6	4,047,072	2,023,536	56.8	2,080,148	1,039,358	31.7	2,254,675
Rhode Island	609,375										609,375
South Carolina	1,692,896				50,787	25,393					1,667,503
South Dakota	2,036,775				516,850	283,389	35.2	296,953	162,819	49.3	1,590,567
Tennessee	2,638,159	43,106	21,553	1.8	1,222,959	611,480	56.5	149,950	74,975	2.2	1,930,151
Texas	7,777,504	397,808	198,700	25.9	6,522,622	3,253,609	362.4	1,783,205	884,981	106.7	3,440,214
Utah	1,410,752	267,727	193,299	17.0	809,658	551,632	61.6	556,533	358,082	27.5	307,739
Vermont	609,375	25,988	12,994	2.9	1,093,744	546,872	50.8	52,043	26,021	4.7	23,488
Virginia	2,278,475				373,687	186,843	10.1	1,687,245	843,623	62.4	1,248,009
Washington	1,949,957	637,523	335,800	18.8	1,756,927	924,149	51.4	461,855	242,770	13.2	447,238
West Virginia	1,356,793	87,161	43,581	3.0	490,373	245,186	29.1	371,799	185,900	12.7	882,126
Wisconsin	3,045,557	375,306	187,653	14.1	1,312,394	655,060	62.4	725,939	360,377	21.6	1,842,467
Wyoming	1,559,444	522,317	321,249	83.6	1,968,673	1,212,486	191.0	46,782	23,391		2,318
District of Columbia											
Hawaii	609,375				67,469	33,734	.5	203,132	99,148	3.0	476,493
TOTALS	121,875,000	8,946,550	4,735,228	886.6	75,812,776	39,840,648	3,441.2	40,398,249	20,508,092	1,581.1	56,791,032

CURRENT STATUS OF UNITED STATES WORKS PROGRAM HIGHWAY PROJECTS

(AS PROVIDED BY THE EMERGENCY RELIEF APPROPRIATION ACT OF 1935)

AS OF FEBRUARY 29, 1936

STATE	APPORTIONMENT	COMPLETED			UNDER CONSTRUCTION			APPROVED FOR CONSTRUCTION			BALANCE OF FUNDS AVAILABLE FOR NEW PROJECTS
		Estimated Total Cost	Works Program Funds	Miles	Estimated Total Cost	Works Program Funds	Miles	Estimated Total Cost	Works Program Funds	Miles	
Alabama	$ 4,151,115	$ 84,629	$ 84,629	10.9	$ 2,416,263	$ 2,416,263	66.4	$ 1,092,331	$ 1,092,331	41.5	$ 642,521
Arizona	2,569,841				1,218,766	1,161,624	69.6	929,024	590,863	55.5	732,726
Arkansas	3,352,061				1,373,930	1,372,312	102.6	1,083,362	1,081,561	107.9	898,188
California	7,747,928	11,043	10,500	7.2	3,835,105	3,653,852	159.3	1,743,716	1,706,864	50.9	2,376,713
Colorado	3,395,263	38,291	38,291	1.5	1,064,534	1,064,143	71.7	641,682	641,682	12.8	1,651,147
Connecticut	1,418,709										1,418,709
Delaware	900,310				163,589	163,589	19.2	414,054	414,053	39.6	322,667
Florida	2,597,144				1,010,892	993,019	37.6	708,348	708,348	17.0	895,777
Georgia	4,988,967				400,541	400,541	25.7	133,105	133,105	9.3	4,455,322
Idaho	2,222,747				1,042,354	1,039,713	87.7	273,196	245,986	24.8	937,048
Illinois	8,694,009				2,684,557	2,684,557	115.8	3,668,848	3,668,848	274.2	2,340,604
Indiana	4,941,255				1,096,432	1,096,432	51.9	3,165,369	3,165,369	174.5	679,453
Iowa	4,991,664	15,034	14,100	6.6	757,552	723,065	60.6	1,622,893	1,543,934	217.8	2,710,565
Kansas	4,994,975	3,552	3,552	1.8	1,627,778	1,627,778	180.1	2,163,149	2,162,149	134.7	1,201,497
Kentucky	3,726,271				923,165	923,165	148.4	1,614,259	1,599,243	160.2	1,203,863
Louisiana	2,890,429							817,186	544,923	36.1	2,345,506
Maine	1,676,799				704,321	704,321	33.4	709,643	709,095	29.7	263,382
Maryland	1,750,738							338,360	304,528	12.3	1,446,210
Massachusetts	3,262,885							115,246	115,246	1.1	3,147,639
Michigan	6,301,414	449,100	449,100	25.4	4,790,471	4,730,441	219.3	850,650	850,650	35.4	271,223
Minnesota	5,277,145	55,973	55,973	37.5	1,194,268	1,112,592	79.7	2,030,748	1,740,392	539.2	2,368,189
Mississippi	3,457,552				1,519,019	1,515,926	81.2	638,746	638,746	51.1	1,302,880
Missouri	6,012,652	94,525	94,525	59.0	1,892,404	1,892,404	372.4	1,668,768	1,668,768	294.6	2,356,955
Montana	3,676,416				2,064,522	2,064,522	113.9	1,174,460	1,174,460	63.1	437,433
Nebraska	3,870,739				1,096,794	1,067,688	103.0	1,151,199	1,151,199	119.6	1,651,852
Nevada	2,243,074	13,570	13,570		1,536,578	1,497,008	59.4	108,971	108,971	5.6	623,524
New Hampshire	945,225				257,318	255,212	7.9	223,046	162,899	9.8	527,114
New Jersey	3,129,805				507,749	507,749	8.5	1,183,286	1,183,286	4.4	1,438,770
New Mexico	2,871,397				1,406,674	1,406,674	105.1	673,141	673,141	48.0	791,581
New York	11,046,377				4,132,138	4,076,148	32.8	2,653,090	2,467,179	35.9	4,503,049
North Carolina	4,720,173				1,281,584	1,281,584	112.0	1,091,466	988,263	70.8	2,450,326
North Dakota	2,867,245	140,150	140,150	20.8	319,882	319,882	47.3	251,721	251,721	38.5	2,155,491
Ohio	7,670,815				1,268,672	1,268,672	14.0	2,463,910	2,374,310	26.4	4,027,833
Oklahoma	4,580,670				601,196	601,196	46.4	1,732,948	1,732,948	182.0	2,246,526
Oregon	3,038,642				1,457,373	1,447,373	47.1	741,659	724,394	81.8	866,876
Pennsylvania	9,347,797				149,696	149,696	.1	1,033,171	996,289	42.3	8,201,812
Rhode Island	989,208				113,368	113,368	4.0	624,495	620,828	12.7	255,013
South Carolina	2,702,012				396,563	396,563	29.2	738,848	738,548	79.4	1,566,901
South Dakota	2,976,454	79,687	79,687	30.1	591,880	591,880	152.3	518,234	518,234	105.1	1,786,654
Tennessee	4,192,460				721,617	721,617	29.7	859,134	859,134	33.8	2,611,708
Texas	11,989,350	8,068	7,769	4.9	5,460,051	4,971,771	458.0	3,550,548	3,460,677	323.3	3,549,133
Utah	2,067,154	51,885	51,885		648,832	626,014	61.4	344,629	327,245	27.3	1,062,009
Vermont	924,306				329,989	324,689	8.6	521,745	464,004	11.2	135,613
Virginia	3,652,667	49,453	49,453	45.8	1,072,429	1,072,429	551.4	847,286	847,286	230.5	1,683,500
Washington	3,026,161	696	696	.1	1,902,513	1,772,571	98.7	851,457	756,123	44.8	496,771
West Virginia	2,231,412				574,968	574,968	30.3	689,290	689,290	20.4	967,154
Wisconsin	4,823,884	60,230	50,000	1.3	1,510,626	1,296,346	68.3	2,578,769	2,395,365	197.0	1,082,174
Wyoming	2,219,155				1,010,633	1,010,628	52.6	706,069	706,061	60.8	502,466
District of Columbia	949,496	259,904	259,904	2.1	499,239	475,209	4.0	100,458	100,458	1.5	113,925
Hawaii	926,033				467,808	451,279	5.9	190,846	189,483	3.0	285,271
TOTALS	195,000,000	1,415,790	1,403,784	255.0	61,096,633	59,618,473	4,234.5	54,026,559	51,988,480	4,199.2	81,989,263

CURRENT STATUS OF UNITED STATES WORKS PROGRAM GRADE CROSSING PROJECTS

(AS PROVIDED BY THE EMERGENCY RELIEF APPROPRIATION ACT OF 1935)

AS OF FEBRUARY 29, 1936

STATE	APPORTIONMENT	COMPLETED				UNDER CONSTRUCTION				APPROVED FOR CONSTRUCTION				BALANCE OF FUNDS AVAILABLE FOR NEW PROJECTS
		Estimated Total Cost	Works Program Funds	NUMBER		Estimated Total Cost	Works Program Funds	NUMBER		Estimated Total Cost	Works Program Funds	NUMBER		
				Eliminated by Separation or Relocation	Protected By Signals or Otherwise			Eliminated by Separation or Relocation	Protected By Signals or Otherwise			Eliminated by Separation or Relocation	Protected By Signals or Otherwise	
Alabama	$ 4,034,617					$ 1,832,926	$ 1,832,926	22		$ 1,710,621	$ 1,710,621	12	5	$ 491,070
Arizona	1,256,099					671,074	517,320	6		18,841	18,841			719,937
Arkansas	3,574,060					620,759	618,306	17		1,172,954	1,170,585	23		1,785,169
California	7,486,362					5,540,497	5,303,044	32		453,611	449,137	3		1,734,181
Colorado	2,631,567					878,180	857,180	16		237,525	237,525	2		1,536,862
Connecticut	1,712,684													1,712,684
Delaware	418,239													418,239
Florida	2,827,883					1,062,271	1,060,541	9		324,779	324,779	4		1,442,563
Georgia	4,895,949									162,089	162,089	4		4,733,860
Idaho	1,674,479					622,844	622,844	11		200,738	160,575	1		891,059
Illinois	10,307,184					962,723	962,723	6		2,740,904	2,740,904	36		6,603,557
Indiana	5,111,096					1,514,881	1,514,881	10		1,469,075	1,469,075	10		2,127,140
Iowa	5,600,679	$ 7,303	$ 7,000	1		757,084	725,950	11		902,432	861,900	22		4,005,829
Kansas	5,246,258					468,857	468,857	4		3,747,895	3,747,895	39	1	1,029,506
Kentucky	3,672,387					559,534	531,721	6		2,042,694	1,517,666	13		1,623,000
Louisiana	3,213,467									1,294,380	1,026,000	13		2,187,467
Maine	1,426,861					223,011	222,677	4		293,806	293,806	5		910,378
Maryland	2,061,751									1,007,064	984,595	7		1,077,155
Massachusetts	4,210,833					676,151	676,151	3		329,368	329,368	3		3,205,314
Michigan	6,765,197					2,857,252	2,857,252	29		2,414,350	2,414,350	12		1,493,595
Minnesota	5,395,441	103,407	103,407	2		471,712	465,662	6		383,755	383,755	11	1	4,442,618
Mississippi	3,241,475					507,884	507,884	14		1,021,396	1,021,396	15		1,712,195
Missouri	6,142,153					226,838	226,838	3		2,071,417	2,071,417	10		3,843,898
Montana	2,722,327					1,679,800	1,679,800	30		493,437	493,437	7		549,090
Nebraska	3,556,441					880,332	880,332	26		1,078,215	1,078,215	35		1,597,894
Nevada	887,260					306,096	306,096	7		13,308	13,308			567,856
New Hampshire	822,484					140,766	140,766			81,765	81,765			599,953
New Jersey	3,983,826									693,642	693,642	4		3,290,184
New Mexico	1,725,286					414,122	414,122	5		422,145	399,901	5		911,264
New York	13,577,189					3,200,210	3,096,910	8		2,797,610	2,760,610	12		7,719,669
North Carolina	4,823,958					780,498	780,498	7		436,156	436,156	7		3,607,304
North Dakota	3,207,473					139,213	139,213	3		91,932	91,932	2		2,976,328
Ohio	8,439,897					126,598	126,598			254,100	244,100	4		8,069,199
Oklahoma	5,004,711					834,620	834,620	15		804,608	799,578	15		3,370,514
Oregon	2,334,204					809,380	807,714	7		644,464	644,464	5		882,026
Pennsylvania	11,483,613					219,670	203,527	5		1,109,458	1,064,958	18		10,215,128
Rhode Island	699,691					236,879	236,879			457,910	419,691	4		43,121
South Carolina	3,059,956					444,976	444,976	9		617,402	617,334	18		1,997,646
South Dakota	3,249,086					175,596	175,596	4		223,099	223,099	2		2,850,391
Tennessee	3,903,979					165,074	165,074	2		222,672	222,672	4		3,516,233
Texas	10,855,982	9,076	9,076	1		634,332	634,332	13		4,091,305	3,406,473	44		6,806,101
Utah	1,230,763					162,902	162,902	1		349,742	296,674	6		771,187
Vermont	729,857					351,069	349,711	4		161,254	161,254	5		218,892
Virginia	3,774,287					224,389	224,389	4		191,744	191,744	7		3,358,154
Washington	3,095,041					1,376,035	1,371,235	16		350,008	350,008	3		1,373,798
West Virginia	2,677,937													2,677,937
Wisconsin	5,022,683					1,357,726	1,294,991	13		1,073,428	1,073,428	11		2,654,264
Wyoming	1,360,841					55,366	55,365	2		20,412	20,412			1,285,064
District of Columbia	410,804					166,697	166,697	2						244,107
Hawaii	453,703					173,742	173,742	2		141,131	141,131	1		138,830
TOTALS	196,000,000	119,786	119,483	4		35,510,566	34,838,842	394		40,820,641	39,022,265	464	7	122,019,410

PUBLICATIONS of the BUREAU OF PUBLIC ROADS

Any of the following publications may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. As his office is not connected with the Department and as the Department does not sell publications, please send no remittance to the United States Department of Agriculture.

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Report of the Chief of the Bureau of Public Roads, 1924. 5 cents.

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Report of the Chief of the Bureau of Public Roads, 1928. 5 cents.

Report of the Chief of the Bureau of Public Roads, 1929. 10 cents.

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Report of the Chief of the Bureau of Public Roads, 1932. 10 cents.

Report of the Chief of the Bureau of Public Roads, 1933.

Report of the Chief of the Bureau of Public Roads, 1934.

Report of the Chief of the Bureau of Public Roads, 1935.

DEPARTMENT BULLETINS

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Federal Legislation and Regulations Relating to Highway Construction. 10 cents.

MISCELLANEOUS PUBLICATIONS.—Cont.

Supplement No. 1 to Federal Legislation and Regulations Relating to Highway Construction.

No. 191 . . . . Roadside Improvement. 10 cents.

The Taxation of Motor Vehicles in 1932. 35 cents.

An Economic and Statistical Analysis of Highway-Construction Expenditures. 15 cents.

Single copies of the following publications may be obtained from the Bureau of Public Roads upon request. They cannot be purchased from the Superintendent of Documents.

MISCELLANEOUS CIRCULARS

No. 62MC . . Standards Governing Plans, Specifications, Contract Forms, and Estimates for Federal-Aid Highway Projects.

SEPARATE REPRINT FROM THE YEARBOOK

No. 1036Y . . Road Work on Farm Outlets Needs Skill and Right Equipment.

TRANSPORTATION SURVEY REPORTS

Report of a Survey of Transportation on the State Highway System of Ohio (1927).

Report of a Survey of Transportation on the State Highways of Vermont (1927).

Report of a Survey of Transportation on the State Highways of New Hampshire (1927).

Report of a Plan of Highway Improvement in the Regional Area of Cleveland, Ohio (1928).

Report of a Survey of Transportation on the State Highways of Pennsylvania (1928).

Report of a Survey of Traffic on the Federal-Aid Highway Systems of Eleven Western States (1930).

A complete list of the publications of the Bureau of Public Roads, classified according to subject and including the more important articles in PUBLIC ROADS, may be obtained upon request addressed to the U. S. Bureau of Public Roads, Willard Building, Washington, D. C.

CURRENT STATUS OF UNITED STATES PUBLIC WORKS ROAD CONSTRUCTION

AS PROVIDED BY SECTION 204 OF THE NATIONAL INDUSTRIAL RECOVERY ACT (1934 FUNDS) AND BY THE ACT OF JUNE 18, 1934 (1935 FUNDS)

AS OF FEBRUARY 29, 1936

STATE	APPORTIONMENTS		COMPLETED				UNDER CONSTRUCTION				APPROVED FOR CONSTRUCTION			BALANCE OF FUNDS AVAILABLE FOR NEW PROJECTS	
	Sec. 204 of the Act of June 16, 1933 (1934 Fund)	Act of June 18, 1934 (1935 Fund)	Total Cost	1934 Public Works Funds	1935 Public Works Funds	Mileage	Estimated Total Cost	1934 Public Works Funds	1935 Public Works Funds	Mileage	1934 Public Works Funds	1935 Public Works Funds	Mileage	1934 Public Works Funds	1935 Public Works Funds
Alabama	$ 8,370,133	$ 4,259,842	$ 14,045,683	$ 8,136,887	$ 2,586,365	729.1	$ 1,176,255	$ 186,798	$ 984,658	44.2		$ 353,398	3.1	$ 46,448	$ 335,422
Arizona	5,211,960	2,641,935	8,679,591	5,208,724	2,386,912	540.6	254,875		170,187	5.3		22,514		3,236	62,321
Arkansas	6,748,335	3,428,049	10,172,613	6,547,823	2,652,050	569.7	640,657	80,706	558,509	32.6	$ 628	164,278	17.4	119,178	53,212
California	15,607,354	7,932,206	27,607,917	15,601,832	6,217,972	751.8	2,711,594		1,563,045	21.7		127,482	.2	5,522	23,707
Colorado	6,874,530	3,486,006	11,132,624	6,831,431	3,452,626	636.4	5,012		5,012					43,099	28,368
Connecticut	2,865,740	1,454,868	4,182,222	2,825,079	941,105	69.2	359,166		343,645	3.7		88,859	1.0	40,661	81,258
Delaware	1,819,088	923,395	2,645,646	1,819,088	782,660	128.2	32,528		32,528						108,207
Florida	5,231,834	2,661,343	8,231,537	5,188,636	1,836,663	281.5	635,958		554,003	25.6		185,299	2.5	43,198	85,378
Georgia	10,091,185	5,113,491	11,772,149	9,085,816	2,240,596	673.9	1,497,125	458,333	990,769	69.4	257,556	727,936	65.0	289,481	1,154,190
Idaho	4,486,249	2,277,486	6,201,261	4,394,175	1,404,209	488.7	749,957		748,707	9.9	59,759	63,355	2.9	32,315	61,215
Illinois	17,570,770	8,921,401	21,273,789	15,673,445	5,023,137	605.1	5,126,617	1,827,177	3,278,908	89.6	3,838	333,317		66,311	286,039
Indiana	10,037,843	5,088,963	12,806,330	9,412,488	2,860,958	389.8	2,306,108	435,020	1,836,585	95.9	63,969	330,150	2.3	126,366	61,271
Iowa	10,055,660	5,118,361	15,220,921	9,939,405	4,686,934	1,214.2	297,801	114,154	162,100	4.8		226,800	5.0	2,101	42,527
Kansas	10,089,604	5,117,675	14,151,196	9,961,286	3,808,264	1,070.1	1,327,587	39,153	1,288,434	62.2	68,553	13,352	2.2	20,611	7,625
Kentucky	7,517,359	3,818,311	10,646,935	6,981,045	2,931,863	760.4	1,086,836	432,327	572,873	44.8	55,381	129,854	7.6	48,606	183,721
Louisiana	5,828,591	2,963,932	7,783,356	5,153,539	2,018,142	213.4	1,163,590	608,584	555,006	34.1	10,666	165,106	2.9	55,802	225,678
Maine	3,369,917	1,711,586	4,918,915	3,342,536	1,374,521	184.8	286,379		286,364	8.3				27,381	50,701
Maryland	3,564,527	1,810,058	4,304,695	2,786,846	598,990	113.3	1,163,202	706,935	450,722	31.3		232,489	7.1	70,745	527,858
Massachusetts	6,597,100	3,350,474	7,007,820	4,587,052	1,833,767	104.3	3,148,543	1,974,333	1,174,210	11.0				35,715	342,497
Michigan	12,736,227	6,452,568	18,032,304	12,544,952	4,468,553	673.1	2,143,975	163,400	1,922,598	95.7		30,825	.1	27,875	30,592
Minnesota	10,656,569	5,425,551	15,381,107	9,883,265	4,774,414	1,624.1	845,761	646,206	188,445	25.9	7,260	189,542	1.8	119,838	273,150
Mississippi	6,978,675	3,540,227	10,326,747	5,996,359	1,654,691	598.0	2,460,554	860,229	1,374,620	122.2	466	424,457	26.3	121,622	86,459
Missouri	12,180,306	6,173,740	14,948,147	10,885,170	3,122,158	1,350.3	4,343,218	1,185,562	2,884,895	100.7		129,872	.4	109,574	36,815
Montana	7,439,748	3,769,734	11,027,593	7,179,659	3,196,815	1,006.2	614,655	159,632	455,023	24.8				100,457	117,896
Nebraska	7,828,961	3,964,364	12,368,929	7,730,625	3,377,119	992.1	732,366	35,778	457,313	42.0		120,283	9.2	62,559	9,648
Nevada	4,545,917	2,302,356	6,682,846	4,491,366	1,950,269	736.0	355,003	26,150	292,747	21.7		23,629		28,401	35,711
New Hampshire	1,909,839	969,462	2,939,612	1,909,443	905,742	77.2	28,026		28,026	.5		5,000		396	30,694
New Jersey	6,346,039	3,220,879	6,832,962	6,001,676	473,165	74.9	2,751,538	175,941	2,258,664	12.4				168,421	489,050
New Mexico	5,792,935	2,941,700	8,501,231	5,632,432	2,663,078	766.2	151,695		151,695	1.1	114	4,648		160,389	122,280
New York	22,330,101	11,327,921	37,237,553	21,605,913	9,116,596	799.8	3,116,050	503,700	2,063,799	25.0	75,977	70,200	.9	144,511	77,326
North Carolina	9,522,293	4,840,941	14,243,087	9,048,146	3,979,900	1,320.3	742,808	146,303	579,610	21.6	1,503	208,644	4.3	326,341	72,787
North Dakota	5,804,448	2,938,967	7,295,618	5,497,567	1,150,255	1,949.5	789,722	130,778	600,349	112.4	67,289	493,179	66.7	108,814	695,184
Ohio	15,484,592	7,865,012	22,531,139	15,277,147	5,585,378	748.8	2,240,266	158,521	1,976,366	35.1		67,558	10.8	48,924	235,710
Oklahoma	9,216,798	4,685,180	13,093,192	9,055,703	3,116,435	766.7	1,329,166	147,071	1,180,359	37.9		147,576	1.6	14,023	240,809
Oregon	6,106,896	3,097,814	9,490,294	5,956,043	2,669,034	461.8	323,223	30,834	264,264	3.6	53,642	17,837	2.9	66,378	146,679
Pennsylvania	18,891,004	9,590,788	27,262,251	17,884,019	8,122,157	981.5	1,597,854	736,539	775,268	76.8	5,126	307,671	2.1	265,320	385,691
Rhode Island	1,998,708	1,014,572	2,958,197	1,998,708	853,971	88.0	138,587		137,102	1.1		880			22,619
South Carolina	5,459,165	2,770,954	6,977,330	5,259,226	1,545,838	576.9	843,556	32,110	769,487	41.4	11,220	19,503	.2	156,609	436,126
South Dakota	6,011,479	3,047,643	8,525,798	5,773,385	2,198,377	1,471.1	484,072	15,396	468,676	52.8	69,251	273,533	27.9	153,447	107,057
Tennessee	8,492,619	4,302,991	12,075,413	8,183,983	3,022,867	461.8	1,229,327	307,391	825,535	22.3		267,474	8.9	1,245	187,115
Texas	24,244,024	12,291,253	33,655,585	23,367,015	8,715,836	2,680.0	4,501,523	829,368	3,443,215	97.8	1,537	21,558	14.5	46,104	110,644
Utah	4,194,708	2,132,691	6,936,503	4,156,356	1,862,147	584.0	327,904	6,060	267,191	6.9		1,500		32,291	1,853
Vermont	1,867,573	948,007	3,038,539	1,863,531	845,644	137.6	109,059	3,922	90,873	2.4				121	11,489
Virginia	7,416,757	3,765,387	11,225,077	7,171,544	3,134,345	573.0	463,452	91,148	364,960	44.1	104,541	51,381	3.5	49,523	214,701
Washington	6,115,867	3,106,412	8,769,969	6,101,000	2,449,790	291.0	639,072		632,975	11.8		1,727		14,867	21,920
West Virginia	4,474,234	2,280,335	5,411,399	4,242,219	988,925	186.5	1,134,352	199,016	881,403	31.9		147,956	4.0	32,999	262,051
Wisconsin	9,724,881	4,941,837	14,826,227	9,626,072	4,299,948	604.7	572,508	7,300	522,766	15.3		97,591		91,509	21,533
Wyoming	4,501,327	2,287,712	6,667,080	4,433,877	2,053,207	1,008.5	223,172	46,705	149,732	28.8		47,239		20,745	37,535
District of Columbia	1,918,469	973,842	2,570,032	1,909,584	660,313	19.5	313,125		277,625	2.9				8,885	35,904
Hawaii	1,871,062	949,778	1,496,428	1,122,101		32.2	1,500,112	740,221	562,704	20.4		353,640	3.0	8,740	33,434
TOTALS	394,000,000	200,000,000	566,113,389	375,265,219	142,594,701	33,165.8	61,015,491	14,248,801	42,404,550	1,733.7	918,276	6,689,092	308.3	3,567,704	8,311,657

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